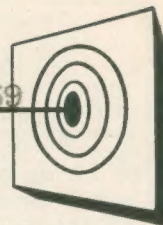


Precision

Earl W. Biesecker
6661 W. Burleigh St.
Milwaukee 10, Wisc.

Apr. 59



SHOOTING

VOL. 3, NO. 6

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OCTOBER 1958



Anchorage, Alaska, shooters. Back row, left to right, Dick Drew, Scott Donaldson, Bud Ertwine and Bob Self. Front row, Dave Drew, Sgt. Chuck Miller and Capt. Bob Redfield.

a magazine for Shooters by Shooters

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LET'S APPOINT HIM CHAIRMAN

We would like to call special attention to the letter from De Vere Hinckley, beginning on this page, and its many excellent suggestions.

When a member of any organization suggests fresh ideas it is normal procedure to appoint that member as chairman of a committee to test his ideas. While Mr. Hinckley is not a member of the NBRSA, he quite evidently is a full fledged member of the shooting clan and we think it quite proper for the Clan to appoint him Chairman of a committee to test out at least one of his suggestions; he to have choice of his test subject and permission to enlist his committee members.

If Mr. Hinckley will accept that appointment, and outline his test program, Precision SHOOTING will announce his program and appeal for committee members to assist him, and will carry progress reports of the test program that may be supplied us.

Mr. Hinckley's is not a lone voice in the wilderness. We know that the International course shooters are working on their weapon problems, right now, and probably others are doing experimental work on other types of weapons. We will write more along these lines in future months, and will welcome more ideas and suggestions. Precision SHOOTING is dedicated to service for shooters—make use of it. PHT

LETTERS

Dear Phil:

In the August issue of P. S. is an article by Sherman W. Church in regard to removing Parallax. While this is a method that will get results, the reading of it can cause confusion and does. I have found many people who think that parallax exists in the EYE PIECE and that the eye piece has something to do with parallax. It does not, other than that when the eye piece is not in good focus, there is more or less blur.

Webster states that parallax is "the apparent displacement of an object, as seen from two different points." The target moves, or is displaced, in regard to the reticle, when the eye is moved to a different point, if parallax is there. There can be no parallax in the eye piece of a telescope because the reticle is the object and there is no image of it except in the brain. To prove this, set up a rifle scope in which there is no parallax so

that it is solid on an object at the proper distance. Now screw the eye piece in or out. All that can be noted is BLUR. Even tho there is a lot of blur, the target will be seen to stand still amidst this blur. This is because the IMAGE of the OBJECT, or target, and the RETICLE are in the SAME plane, and we have not disturbed this setup.

Also in the reference to "Cross Parallax" there is one more condition which can cause it. Many times in a reticle that consists of wires or spiderwebs, both wires are not necessarily in exactly the same plane—this can be determined with a hipower eye piece, one wire will be in sharper focus than the other.

John B. Sweany
Calistoga, Calif.

Dear Phil:

The New Jersey civ. big bore team arrived at Perry on 23 Aug. We took in the small arms firing school, the individual matches and all of the team events. We were surprised by the size of the military entry. The civilian competitors were outnumbered by about 5 to 1. Nevertheless, a few matches were won by civilian shooters.

The big all Army team, which lorded over everyone at the Ft. Dix regional apparently ran out of gas as the Marines came through again to win several of the individual and team events. They also took the Wimbledon with a 100-17V using a M-70 with a Douglas barrel, Unertl scope, and Match Kings in Rem. cases.

The D. C. M. gave out five custom built M-1 rifles as awards which were comparable to anything made by our finest civilian gunsmiths. As for the N. R. A. awards, they were as meager as ever. Being awarded a photograph of a trophy just does not take the place of taking home the trophy itself.

When one realizes that the military supplies all the range personnel, (about a thousand men), the ammo, targets, the Ordnance repair units, runs the mess hall, police, maintenance, supply, etc., and the N. R. A. only supplied 4 referees, some office personnel, and the awards; **one wonders where all the entry fees go.** The six of us from Jersey spent over \$175.00 on entry fees. There were about 2,000 big bore shooters plus an unknown number of pistol and small bore shooters. One need not be a C. P. A. to realize that a considerable amount of money is involved. The writer is yet to see a complete financial report on the National Matches and probably never will.

The shanty town living quarters have received utterly no maintenance for years. The writer constantly had to shift his cot to avoid leaks when it rained. For days we had a rat commuting between our hut and the one next door via the holes in the baseboards. Apparently she was one of the permanent personnel since she knew her way around and didn't have a competitors badge!

The FA 58 match ammo was truly a vintage lot. Everyone spoke highly of it. The food was very good both in quality and quantity. Overall range operation by pit men, scorers, and range officers was satisfactory in most instances. Nevertheless, Perry has been pushed to the limit of range capacity. The Leech cup match at 1,000 yds., was cancelled this year to permit scheduling the other events.

STATEMENT OF OWNERSHIP AND MANAGEMENT

Statement required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) showing the ownership, management, and circulation of:

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1. The names and addresses of the publisher, editor, managing editor, and business manager are:

Publisher—PRECISION SHOOTING INC., 83 Eastern Avenue, St. Johnsbury, Vt.

Editor—P. H. Teachout, 64 Depot Street, Lyndonville, Vt.

Managing Editor—none

Business manager—P. H. Teachout, 64 Depot Street, Lyndonville, Vt.

2. The owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock.)

Owner: PRECISION SHOOTING INCORPORATED, 83 Eastern Ave., St. Johnsbury, Vt.

Names and addresses of stockholders owning or holding 1 percent or more of total amount of stock.

John F. Collins, 95 Devon Road, Rochester 19, N. Y.; Mary W. Hollidge, Cotuit Road, Marston's Mills, Mass.; Crawford H. Hollidge, Cotuit Road, Marston's Mills, Mass.; Irven M. Mohnkern, 232 So. Patterson, State College, Pa.; Rose Mohnkern, 232 So. Patterson, State College, Pa.; Dermot C. Reilly, 445 Western Ave., Albany 3, N. Y.; William E. Cotter, 159 Church St., Little Falls, N. Y.; W. E. Peterson, Orchard Lane, New Canaan, Conn.; Francis S. Yenowine, 1401 No. 13th St., Terre Haute, Ind.; 10-X Manufacturing Co., 405 E. 2nd St., Des Moines, Iowa; George Bjornstad, 1626 Fargo Ave., Chicago, Ill.; Al Freeland, 3737 14th Ave., Rock Island, Ill.; Andrew H. Brower, Roxbury, N. Y.; Paul McKnight Deeley, 510 Oakridge Ave., No. Plainfield, N. J.; Paul O. Gottschall, R. D. 4, Salem, Ohio; Tulsa Bench Rest Rifle Club, c/o R. G. Berry, Pawnee, Okla.; H. M. Aitken, 213 Garfield Ave., Eau Claire, Wis.; Roy C. Blumenshine, 908 East Main St., Streator, Ill.; Leo J. Aronsohn, Deer Park Rd., Great Neck, N. J.; Jonas Halgrimson, c/o 1400 Installation sqdn., APO 81, New York, N. Y.; Sam Bond, New Philadelphia, Ohio; Donald R. Combs, R. D. 2, Salem, Ohio; Robert F. Stinehour, Rt. 9 W. M. D. 26, Newburgh, N. Y.; Edward Mallinkrodt, 3600 North Second St., St. Louis, Mo.; National Bench Rest Shooters Ass'n, Inc., Lyndonville, Vt.; P. H. Teachout, 64 Depot St., Lyndonville, Vt.; M. C. Babcock, 703 West Lake Rd., Hammondport, N. Y.; Robert W. Hart, 300 West 4th St., Nescopeck, Pa.; George P. Herman, 2743 Martin Ave., Omaha, Nebr.; E. D. Benton, 724 Superior Bldg., Cleveland, Ohio; R. L. Sargent, M & M Bldg., Houston 2, Texas; Charles R. Hart, R. D. 2, LaFayette, N. Y.; Frank Murdock, 729 York Road, Towson 4, Md.; Central Texas Rifle & Pistol Club, Box 829, Waco, Texas.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

P. H. Teachout, Editor

Sworn to and subscribed before me this 11th day of Sept. 1958.

P. R. Griswold, Notary Public
(My commission expires Feb. 10, 1959)

The range itself can't be enlarged to any great degree as Erie Ordnance Depot is next door. The first relay was on the line at 0630. The answer to the crowded conditions will possibly be either: limited entries, elimination of bolt gun aggregate, a three week program, or a complete move out of Perry to some unknown but larger location.

Sincerely yours,

Wm. C. Kraemer, Jr. Adjutant
N. J. civilian big bore team

(Continued on Page Eighteen)

Robert W. Smith Is 1958 National Bench Rest Rifle Champion

"TOP TWENTY" IN 1958 NATIONAL BENCH REST RIFLE CHAMPIONSHIPS

	100 yd. Agg.	200 yd. Agg.	Champion- ship Agg.
Robert W. Smith, Texas	.653	.6583	.6557
Ted Holmes, Illinois	.642	.7052	.6736
Paul O. Gottschall, Ohio	.575	.7951	.6851
Harold Shipley, New Mexico	.566	.8220	.6940
W. M. Brown, Ohio	.701	.7032	.7021
Chester Benjamin, Penna.	.652	.8229	.7378
Alfred W. Walter, Missouri	.759	.7561	.7576
Lyle Heap, New York	.745	.7784	.7617
Ed McNally, New York	.773	.7537	.7634
Joseph W. Looper, Virginia	.845	.7118	.7784
Harold Haynam, Ohio	.872	.6916	.7818
George Kelbly, Ohio	.795	.7732	.7841
Donald Smith, California	.787	.8110	.7990
Dr. A. G. Parker, Penna.	.859	.7466	.8028
George McMullen, Ohio	.939	.6675	.8033
L. F. Carden, Kansas	.740	.8696	.8048
C. C. Hankins, Wyoming	.872	.7616	.8168
Clair Hollingsworth, So. Dak.	.724	.9215	.8228
Clyde Yockey, Penna.	.927	.7353	.8311
Irven M. Mohnkern, Penna.	.756	.9094	.8327

Careful, consistent performance under adverse shooting conditions earned the 1958 National Bench Rest Rifle Championship for Robert W. "Bob" Smith of Dallas, Texas. Bob didn't win a single match during the five days of shooting (September 24 through 28) on the John Zink Range near Tulsa, Oklahoma. He placed third in two of the 10-shot matches of the 100 yard stage of the National Championship course, fired on Saturday, Sept. 27th with winds of near-gale velocity throughout the day, to place fifth in the 100 yard aggregate with an average of .653 m.o.a. for the five matches. He didn't place in the high five in any of the five 10-shot matches at 200 yards on Sunday, Sept. 28th but won the 200 yard aggregate with a .6583 m.o.a. average, to give him the Championship win with an average of .6557 minute of angle.

Bob Smith has been a threat in three of the four preceding National Championships. He was runner-up in the first championship competition in Custer, So. Dak. in 1954 (though not generally known, had the NBRSA championship course been computed in minute of angle in 1954, Bob would have been the first bench rest Champ). In 1955, at Johnstown, New York, he failed to place in the "Top Twenty." In 1956, at San Angelo, Texas, he was back in third place. In 1957, at DuBois, Pa., he was back again in runner-up spot.

In the 5-shot warm-up matches on Sept. 24 and 25, Bob placed in only one match, a fourth place in a 100 yard match and, while he had no bad matches, he did not place in the five high for the two day 5-shot match grand aggregate. Bob Smith is not a "flashy" shooter, but an experienced competitor who doesn't relax his care in getting shots off until the last shot of an aggregate is through the last target.

Bob shot the same rifle that took him to runner-up spot last year—a 27" X 1 1/4" barrel made by A. L. Day of Tulsa, Okla., fitted to an F. N. Mauser action and chambered for the .219 Donaldson Wasp case—16 lb. weapon that anyone can recognize as a rifle. He used a 24X Unertl scope. His load was 27 grs. of 3031 powder, his own home-made 53 gr. bullets and Federal primers.

Ted Holmes from Mattoon, Illinois, runner-up to the Champion, was the only other shooter to place in both the 100 and 200 yard sub-aggregates of the championship course, placing third at 100 yards with .642 and fifth at 200 yards with .705 m.o.a. to give him a .6735 m.o.a. average for the championship aggregate. Ted won two of the 10-shot matches at 100 yards and two of the 10-shot matches at 200 yards. Ted has placed in the "Top Twenty" at only one previous national championship—19th ranking shoot at Johnstown, N. Y. in 1955. Ted shot a rifle built in his own Ted Holmes Gun Shop, with 28" X 1 1/4" barrel made in his own shop, fitted to a Schultz and Larsen action and chambered for the .219 Donaldson Wasp case. He used a 30X Unertl scope. His load was 26 1/2 grs. of 3031 powder, bullets made in his own shop and Federal primers. The complete rifle weight was 24 lbs.

Paul O. Gottschall from Salem, Ohio, was third in the championship aggregate with a .6851 m.o.a. aggregate average. He was runner-up in the 100 yard sub-aggregate with .575 but his .705 m.o.a. at 200 yards did not put him in the high-five at that range. Paul is another "aggregate shooter." He made one third and one fifth place in the 100 yard 10-shot matches but did not place in the 200 yard stage matches. He did win one 5-shot match at 100 yards and was runner-up in the grand aggregate of 100 and 200 yard 5-shot warm-up matches. Paul has been in the "Top Twenty" in three of the four preceding national championships (in 1957 he disqualified with only nine shots in one 100 yard target but won the 200 yard sub-aggregate). He shot a 27" X 1 1/4" Hart barrel fitted by himself to his own home-made action and chambered for the .222 Rem. case. He used a 24X Unertl scope. His load was 20.8 grs. of 4198 powder, 6S 51 gr. bullets home-made in B&A dies and Remington primers.

Harold Shipley from Las Cruces, New Mexico, won the 100 yard 10-shot match sub-aggregate with a .566 average under most difficult shooting conditions. He did not place in the five-high at 200 yards but his .822 m.o.a. made him a .694 N. M. C. agg. for fourth ranking position.

ATTENTION INDOOR GALLERY SHOOTERS

The BAY RIFLE CLUB will sponsor a small bore rifle match during February of 1959. Our program reads like a TV give-away show . . . page one \$500.00 to the winner of our 50 shot off hand match, page two another winner will receive a RCBS Loading Press, page 3 one of those fine Black Tool case trimmers, page 4—200 Sierra bullets, page 5 a \$25.00 award, just page after page of this type of awards to winners.

If interested send \$1.00, check, money order or stamps to us for your copy of this program. Hurry cause we've only printed a limited number.

BAY RIFLE CLUB

Box 205 North Bend, Oregon

He won one 100 yard match and placed fourth in another. His only previous national championship competition was at San Angelo, Texas in 1956 where he was seventh ranking shooter in the championship aggregate, shooting a varmint weight rifle. This year he was shooting a 28" X 1 1/4" Hart barrel chambered for the .219 Donaldson Wasp and fitted to a Bellows sleeved action by Geo. M. Fullmer of Oakland, Calif., the gun weighing 20 lbs. He used a Lyman 30X scope. His load was 24.7 grs. of 4198 powder, 51 gr. bullets made by W. M. Brown and C. C. I. primers.

Due to a most unfortunate error by the hard working, efficient but inexperienced statistical office crew who were not properly instructed in computing the National Match Course aggregate, the 200 yard aggregates were not reduced to minute of angle before computing the two range aggregate. This unfortunate error was not discovered until the prize awarding ceremony was over on Sunday evening and some of the competitors having left the range. It was too late then to make a complete recheck of the aggregates and we cannot list the "Top Twenty" in the championship aggregate until we receive the results of that recheck. This incident does point out the absolute necessity for adequate time for careful rechecking of statistics between the finish of championship firing and awarding of prizes. Aside from this one error, due to inexperience and inadequate supervision, the statistical crew at this 1958 shoot did a very fine job of measuring targets and posting results.

We believe the ranking of the above five shooters in the championship is correct and that they are the only competitors with championship course aggregate under .700 minute of angle.

Now that we have given you the end of the story, let's go back and start at the beginning. We hope to have photos for illustration in this issue but if that is not possible we will have them next month.

Don Armstrong, Tulsa Club member who worked with me as assistant range officer during the matches, met me at the Tulsa Airport Tuesday afternoon and took me out to the range to get acquainted with the set-up before the matches started the next morning. Don is an old hand in smallbore and high-power rifle shooting, fully experienced in match operation and it was a real pleasure to have his help on the firing line. On the

(Continued on Page Four)

Robert W. Smith Is 1958 National Bench Rest Rifle Champion

(Continued from Page Three)

way into the terminal building it was a pleasant surprise to get a hail from Al Freeland who with wife Ethel was also just arriving for a first look-see at bench rest competition.

On arrival at the range, on John Zink's huge ranch near Skiatook, we found quite a number of competitors already on deck, getting the feel of the range, and they continued to come in during the balance of the day.

Photos will let you visualize the range set up but some words will help with that. The metal roofed and framed covered firing line has 48 solid concrete benches and a concrete slab floor for shooting at 100 and 200 yards and 300 meters. And those benches were **SOLID**—no control of windage by leaning on the bench here. Only the first 40 of the benches were used for the match firing. On seeing that metal roof on the firing line, some competitors at first thought it would ring from the muzzle blasts, but that didn't prove to be the case—probably because of ample height and not too much overhang. There was some 6 feet of clear space behind the benches, on the concrete slab and under cover, with plenty of bench room at the rear for leaving equipment between matches (believe these benches are used for loading at the club matches).

Shooting is toward the North. The target frames are supported on steel posts set in a concrete base. The set-up is in conveniently handled sections which may be assembled, dis-assembled and moved quickly and quite easily between ranges or for storage. The moving backer is one long strip of paper the full length of the target butts, feeding from a roll and powered by a compact, simple electric motor and speed reduction unit, controlled from the firing line. Individual backer targets were clipped to the paper strip for each match, each numbered to correspond with the target it backed.

Just prior to the shoot a spacious steel roofed and framed shelter, some 60 by 40 feet in area, was erected just across the road in the rear of the firing line. Loading benches were under this shelter, as were plenty of seating benches for competitors and spectators. A house trailer located at one end of this shelter served as statistical office, a lunch concession trailer was located on another corner of the shelter and the "wailing-wall" for target display was on the side toward the firing line.

On Wednesday, Sept. 24th, competitors began to get a taste of the tricky wind conditions on the John Zink Range. For about 50 yards in front of the firing line a screen of trees on the left break up the westerly winds but from there on out the winds from all directions have free play. For the 200 yard 5-shot warm-up matches on the 24th the wind was from the southwest, and plenty of it. During most of the day 5-shot groups under an inch were rare indeed, as the following winning records indicates. One not quite filled relay on the 40 benches took care of the competitors in the warm-up matches. With ample time for reloading between matches, the five matches were completed early in the afternoon. The match winners were:

Match No. 1:—H. E. Powers, Okla. .776"; Donald E. Smith, Calif. .830"; Paul Gottschall, Ohio .865"; Chester Benjamin, Pa. .953"; W. M. Brown, Ohio 1.112".

Match No. 2:—Coleman Brown, Texas .565"; Ross H. Comley, Iowa .992"; Lawrence Rucker, Ohio 1.030"; Ed McNally, N. Y. 1.190"; Powers 1.425".

Match No. 3:—Benjamin .972"; Gottschall 1.028"; Coleman Brown 1.030"; Clair Hollingsworth, So. Dak. 1.170"; Arnold Robinson, Okla. 1.495".

Match No. 4:—Benjamin .498"; Ferris Heffington, Texas .513"; W. M. Starks, Kansas .671"; George Kelbly, Ohio .825"; Powers .875".

Match No. 5:—Heffington 1.115"; Harold Shipley, New Mexico 1.195"; Donald Smith 1.445"; F. L. Magoon, Texas 1.495"; Lyle Heap, N. Y. 1.505".

Thursday, Sept. 25th, had the best conditions for shooting to prevail during the five day match period—weather fair and warm with quite high humidity and light southwesterly winds—to bring normal winning groups for the 5-shot warm-up matches at 100 yards. One relay still handled the competitors and shooting again ended early in the afternoon. Match winners were:

Match No. 6:—Irvn Mohnkern, Pa. .218"; Clair Hollingsworth .232"; Paul Gottschall .248"; Ferris Heffington .325"; Roy Meister, Washington .330".

Match No. 7:—Gottschall .178"; Ross Comley .218"; J. C. Rice, Calif. .250"; Hollingsworth .295"; W. M. Brown .298".

Match No. 8:—Lawrence Rucker .175"; W. M. Starks .180"; Heffington .225"; Hollingsworth .235"; Wm. S. Coleman, Texas .250".

Match No. 9:—Chester Benjamin .200"; Coleman .259"; W. M. Brown .260"; Robert W. Smith, Texas .280"; Roy E. Norman, Washington .298".

Match No. 10:—Heffington .176"; Coleman Brown .242"; Wm. S. Coleman .255"; Lyle Heap .260"; Orren W. Bellows, Pa. .270".

Only one match was fired on Friday, Sept. 26th, a 10-shot match at 100 yards fired in the afternoon, after which merchandise awards were made to competitors in the 5-shot warm-up matches; awards being made by choice according to ranking and all competitors received a merchandise item. Winners in the two range 5-shot match aggregate were:—Chester Benjamin .708; Paul Gottschall .787; Clair Hollingsworth .9655; Ed McNally .9655; Coleman Brown 1.005.

Weather conditions for shooting were quite good and the five top groups for the one 10-shot match at 100 yards were: .295"—.355"—.380"—.405"—.405".

Saturday, Sept. 27th, was a day to try the soul of any rifle competitor and the top ranking groups fired in the 10-shot matches of the 100 yard stage of the Championship course were really noteworthy. Temperatures had cooled during the night to make sweaters and jackets a necessity for comfort and winds throughout the day were northeasterly at near gale velocities, with clear sky and bright sun. Match and aggregate winners were:

Match No. 12:—Ted Holmes, Illinois .291"; C. C. Hankins, Wyoming .375"; Robert W. Smith, Texas .405"; Ross Comley, Iowa .455"; J. C. Rice, Calif. .475".

Match No. 13:—W. C. Farrar, Texas .476"; W. M. Brown, Ohio .530"; Ted Holmes .550"; Chester Benjamin, Pa. .555"; Lyle Heap, N. Y. .561".

Match No. 14:—Harold Shipley, New Mexico .355"; W. M. Brown .490"; Paul Gottschall, Ohio .545"; John E. Warren, Mass. .565"; Coleman Brown, Texas .585".

Match No. 15:—Ted Holmes .440"; Chester Benjamin .473"; Robert W.

Smith .520"; Harold Shipley .565"; Paul Gottschall .612".

Match No. 16:—(Did not get winners' names but the groups were: .316"—.388"—.450"—.458"—.480".)

100 yard aggregate:—Harold Shipley (winner of Speer Trophy) .566"; Paul Gottschall .575; Ted Holmes .642; Chester Benjamin .6528; Robert W. Smith .653.

Sunday morning, Sept. 28th, was clear, comfortably cool with low humidity and light to moderate winds from the north-northeast, seemingly an excellent day for the firing of the 200 yard 10-shot matches of the championship course. But as soon as firing started the competitors began to complain that they couldn't figure out what was happening out there on the range, and they continued to do so throughout the day. Shots outside the target borderline for disqualifications were surprisingly common. Some of the top ranking groups fired were quite good but the aggregate averages were unusually large. The match and aggregate winners were:

Match No. 17:—Ted Holmes, Ill. .760"; Bernice McMullen, Ohio .780"; George McMullen, Ohio .790"; C. L. Neumann, Okla. .810"; James E. Ernst, Mo. .970".

Match No. 18:—L. F. Carden, Kansas .785"; C. L. Neumann .805"; Dr. A. G. Parker, Pa. .810"; George Kelbly, Ohio .862"; Lyle Heap, N. Y. .872".

Match No. 19:—L. F. Carden 1.028"; Irvn Mohnkern, Pa. 1.240"; Ed McNally, N. Y. 1.355"; Joseph W. Looper, Va. 1.475"; W. M. Brown, Ohio 1.485".

Match No. 20:—Ted Holmes .862"; Chester Benjamin, Pa. .893"; Irvn Mohnkern .902"; H. G. Baucher, Kansas .943"; George McMullen 1.040".

Match No. 21:—Orren W. Bellows, Pa. 1.018"; Brunon Boroszewski, N. Y. 1.150"; Clyde Yockey, Pa. 1.158"; Bernice McMullen 1.308"; Coleman Brown, Texas 1.323".

200 yard aggregate:—Robert W. Smith, Texas (winner of Sierra Trophy) .6583 minute of angle; George McMullen, Ohio .6675; Harold Haynam, Ohio .6916; W. M. Brown, Ohio .7032; Ted Holmes, Ill. .7052.

The Champion, Robert W. Smith, was awarded the massive Whelen Trophy, the Field and Stream Cup and the Bausch and Lomb bronze plaque.

A beef barbecue was served at the range after which the prize awarding ceremonies followed in the early evening. In addition to the perpetual trophy awards and cash pool prize awards, the sponsoring Tulsa Bench Rest Rifle Club awarded trophies and medals to top ranking shooters in the championship aggregates and merchandise awards were made by choice according to ranking.

RAMBLING COMMENTS: Serving as chief range officer during the five days of shooting, plus having meetings to attend, your reporter gathered statistics and news notes in a hap-hazard manner, and will pass them along in much the same manner.

There were two somewhat disappointing features of the 1958 National Championship Shoot. The entry was the smallest on record for the five championship shoots held to date—only just over 60 competed in the championship matches. Probably economic conditions were one factor deterring shooters residing at long distances from the shoot site. The controversy over resting methods during the summer shooting season is thought to have had some influence on a smaller than normal entry from the

(Continued on Page Ten)

PLASTIC CARTRIDGE CASES

Development of a triangular plastic cartridge case, for a new pistol of revolutionary design, was announced today by David Dardick, ordnance engineer and President of Dardick Corporation. The Dardick pistol, said to embody the first major change in gun design in more than a century, will be put into commercial production by the end of 1958 by the Dardick Corporation, Hamden, Conn., which is now tooling up for production.

Ammunition for the Dardick hand gun utilizes a triangular cartridge case made of Fortiflex, Celanese Corporation of America's rigid polyethylene. As far as is known, this is the first successful use of plastics for pistol and rifle cartridge cases and the first time that cartridge cases have been made in shapes other than round. Aside from the cartridge case, the projectile and other components of the ammunition are conventional.

The Dardick pistol employs the open-chamber or split-chamber system, whose advantages have been recognized and sought by gun experts for over a century. In brief, it eliminates reciprocating motion, that is, the forward motion of ramming a cartridge into a firing chamber and the backward motion of extracting the fired case, actions that restrict the rate of fire and cause 90% of malfunctions.

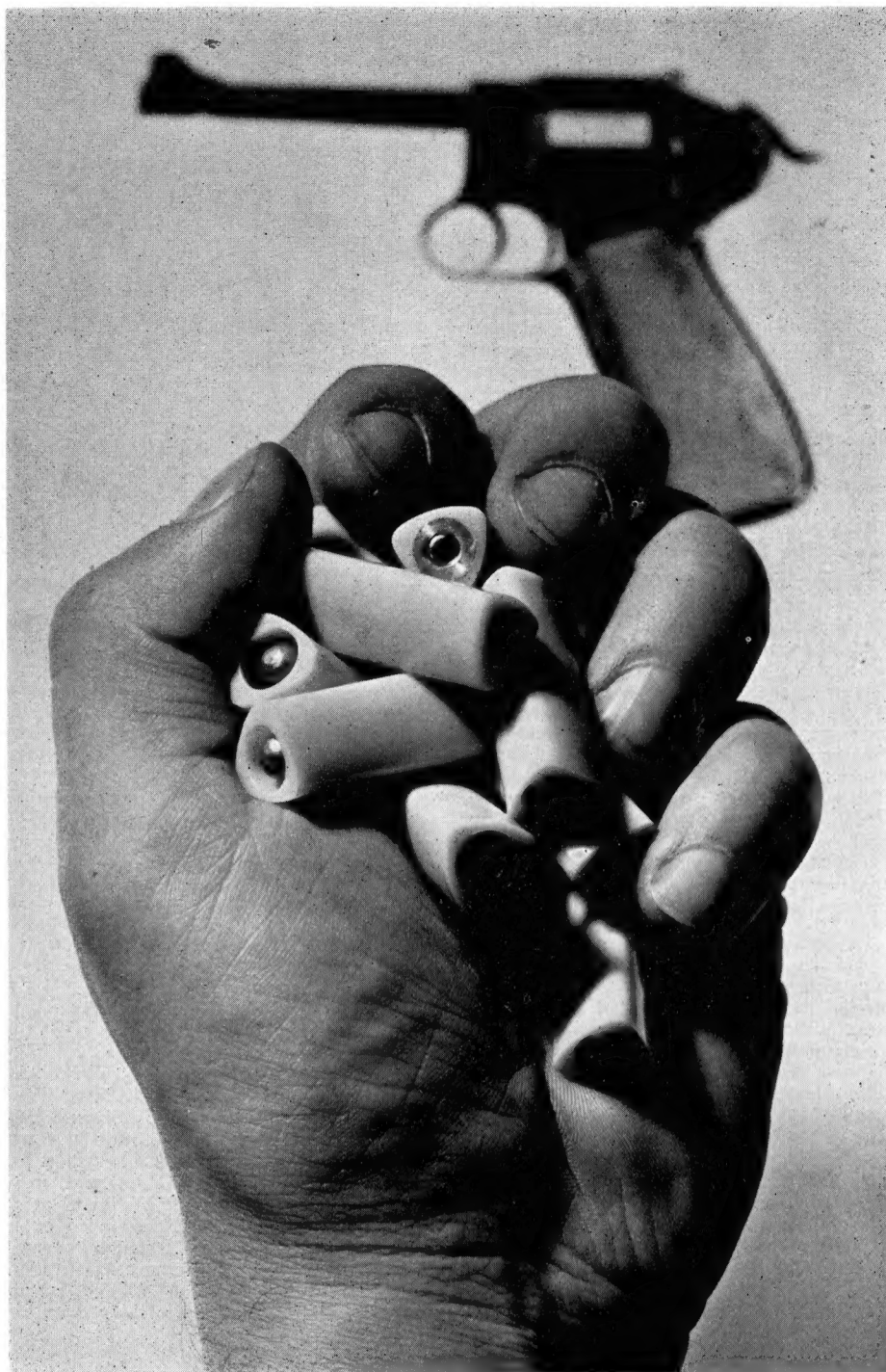
According to Col. Melvin M. Johnson Jr., inventor of the Johnson Automatic Rifle and the Johnson Light Machine Gun, an authority on small arms and consultant to Dardick, the Dardick design possesses so many advantages that in time it will in all probability be universally adopted for all types of firearms. The result of this breakthrough, he says, will be weapons of greater fire power and reliability. They will be shorter, lighter and easier to handle and maintain.

Although the hand gun itself has been shown to the public while the Dardick Corporation has been tooling up during the past year, the plastic cartridge case is a more recent development which contributes greatly to the better ballistics of the gun.

Previous efforts to develop a split-chamber system, Mr. Dardick explained, failed mainly because the round cartridge case, not being completely surrounded by the walls of a firing chamber, ruptured under the high pressure generated by the ignited powder gas. The triangular case, he said, utilizes a structural principle that eliminates the rupturing and the use of Fortiflex enhances the advantages of the system by providing a superior gas seal and minimizing friction. The triangular shape of the cartridge case also makes it possible for the magazine to hold more rounds and to feed smoothly.

Fortiflex is a rigid or linear polyethylene with toughness and heat resistance not found in other types of big-volume, low-cost plastics. It has been in commercial production for about a year and a half.

The Dardick gun functions much like a revolver, but the cylinder has only three compartments or chambers, each of which is open on the outside. The cylinder picks up a cartridge, moves it into firing position and fires it, and ejects it, rotating 120° for each complete cycle, so that the gun is in effect a semi-automatic, continuous feed revolver. Each of the three compartments in the cylinder successively becomes a firing chamber when covered by the stationary main frame. Unless the hammer is deliberate-



Triangular Fortiflex plastic cartridge cases improve the ballistics of the open-chamber Dardick gun, scheduled to go into commercial production by the end of the current year.

ly cocked there is no need for having a live cartridge in front of the barrel, yet the gun is always ready for instant use upon pulling the trigger.

The elimination of such reciprocating parts as breech bolts, rammers, slides, etc. found in all other automatic and semi-automatic weapon, reduces to a hitherto unparalleled minimum the chances of malfunctioning. At the same time it makes possible rates of fire never before attainable, brings over-all gun length to an apparently irreducible minimum, and simplifies cleaning and maintenance.

The use of Fortiflex cartridge cases results in great improvement in the vital matter of reducing friction during feeding and ejection of the case, according to Col. Johnson. The plastic's elasticity permits expansion under high pressures without the case bursting and enables the

ammunition to withstand severe abuse without deformation of the case. Another important feature of the Fortiflex case is its ability to expand within the firing chamber against the barrel face, he stated, thereby providing superior gas seal at all cylinder joints.

Weight savings in cartridge cases on the order of 30 per cent for pistols and 50 per cent for rifles are realized by the use of Fortiflex, Col. Johnson stated, and significant savings in production costs are achieved. The plastic can be color-coded for various types of ammunition and will not corrode or deteriorate during storage. In addition, Fortiflex, unlike brass, is a non-strategic material that in the event of war would not be likely to be in short supply.

The cartridge cases are molded for
(Continued on Page Nineteen)

SISK .22 REVOLVER BULLET

By Kent Bellah

Ralph Sisk has produced the first jacketed bullet designed for hot-shot .22 revolvers. With his cooperation, I designed a pill for higher efficiency than can be obtained with rifle bullets, and it's better than anticipated. Called the Sisk 37-grain Revolver Bullet, it differs from his 35 grain number with a short .320" jacket, has a soft lead core, a small flat nose and a hollow point that extends below the jacket mouth. All modifications were made to increase the explosion at handgun velocity, and retain the accuracy with higher velocity and lower pressure. I stole the basic idea from Harvey Jugulars for .38/357 and .44 revolvers, widely known as "The Most Deadly Bullets." The .22 version is not an exact duplicate as the jacket covers more than the bearing surface and it lacks a sharp shoulder, differences we thought were best for the higher speed small bore.

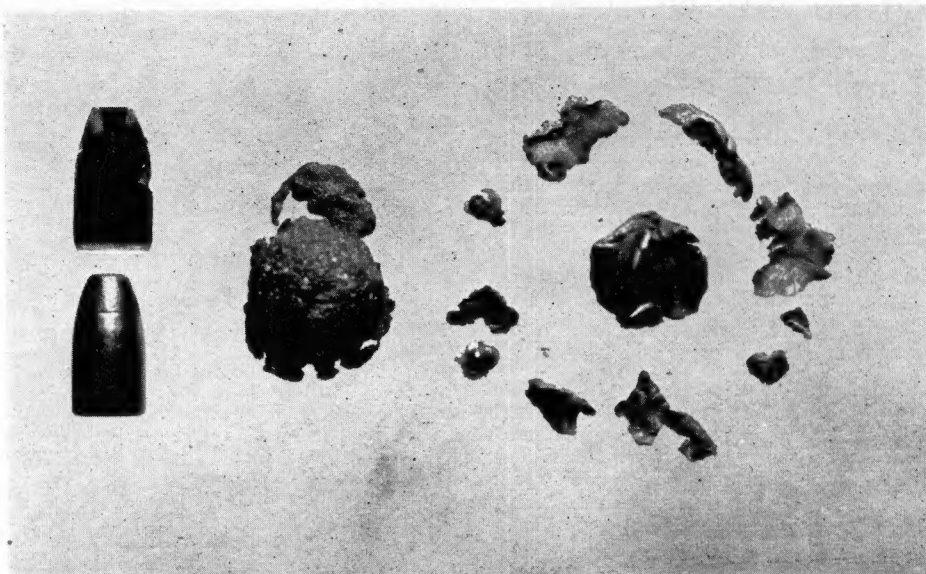
Our efforts were sparked by the superbly accurate Harvey .224 Kay-Chuk, a conversion of the Smith & Wesson K-22, that makes the world's highest velocity handgun. Chambered for the K-Hornet case trimmed .050" and altered to center fire, the little mouse turns into a roaring lion for varmints, targets and plinking. I think it's the easiest to shoot, the easiest and most economical to load with powerful, precision loads for beginner or expert. With almost no recoil to spoil your aim, and with a rifle-like crack, the long range field accuracy is amazing, and so is the rifle-like punch. Perhaps it will spark a much needed factory .22 varmint revolver.

Much of the fine accuracy, killing and shooting qualities of Hi-V .22 varmint rifles has been carried out in the short tube. The highest velocity and accuracy was formerly obtained with the 35 grain Sisk rifle bullet starting at 2,200 fps with 29,000 psi pressure from 9.5 grains 2400. It was, and is a very fine load, but blowup on varmints is less than we desired. As handguns give less velocity than rifles, bullet design and material must be modified for equal or greater shock. I estimate the new bullet delivers more than twice as much shock, that is all out of proportion to the energy.

Various jackets were tested and our design holds the core perfectly, and it doesn't loosen in flight. Bullets pulled from loads with an inertia puller may have the cores loosened, which causes inaccuracy. The cavity design selected after testing exceeded our expectations in accuracy and explosive effect. D. L. Cooper, the fast draw artist and exhibition shooter with the Texas Dept. of Public Safety, had no trouble plinking tin cans at 150 yards with either bullet ahead of 9.5 grains 2400. We shot some canned beets that were bought at a bargain. The 35 grain pill penetrated completely, ripping an exit hole 2" in diameter. The 37 grain number entered the cans and exploded the cans and contents BEFORE penetrating. We never did find an exit hole.

Working up, I found the charge could be increased 2 full grains with excellent accuracy at either end or anywhere between. C. C. I. pistol primers, which I highly recommend, and Remington cases were used. If primers must be substituted, try Remington or Federal pistol numbers. If W-W cases must be used, reduce my loads 20%.

A 11 grain charge with the Revolver



Sisk 37 gr. Revolver Bullet with sectioned view to show the hollow point design. Fired in moist sand from Harvey .224 Kay-Chuk, 3.5 grains Bullseye expands it to .45 caliber. Right: 11 grains 2400 makes it explode fragments like a souped up buzz saw for varmints. Photo by Kent Bellah, courtesy GUNS Magazine.

Bullet seems "adequate," and worked nicely in a K-Hornet rifle for a neat companion gun. Rifles run a desired higher pressure as they have no gas vent ahead of the chamber. A "blind" 11.5 grain charge performed beautifully in two Kay-Chuks. No indication of high pressure was noted, but lab data on pressure and velocity will be available soon. After handgunning over 30 jackrabbits, fox and prairie dogs, examination indicates the new bullet expends far more energy inside the target where it counts. A coyote had part of his face shot away with no visible brain damage, yet dropped in his tracks and was dead in 5 seconds.

Canned beets exploded about the same as when hit with a .222 rifle. Fired in moist sand, the 37 grain pill explodes, turns the jacket wrong side out and starts rolling it up backwards (probably due to rotational velocity). The largest fragment recovered was most of the 5 grain jacket with 9 grains of lead fused to it. Other fragments varied from very small pieces to mere lead smears, indicating violent disintegration. A .222 rifle explodes somewhat more violently in moist sand.

Sisk's 35 grain bullet with the top load of 9.5 grains 2400 starting at 2,200 fps expands well in sand. The recovered slug had shed 12 grains of lead, while the 23 grain fragment that included the 6.5 grain jacket had opened to about $\frac{3}{4}$ " diameter, with the core not so tightly fused to it. These cheaper bullets are excellent for long range targets, small game and plinking, with the loads listed in the July issue. The 3 grains of Bullseye I suggested for targets and squirrels might be better if increased to 3.5 grains, which has proved to be just as accurate. Shock is greater than a .22 L. R.

While the new bullet was designed for maximum shock, shooters who want target/game loads along with hot varmint fodder will find it quite versatile by varying the load. 3.5 grains Bullseye kills quickly and isn't too destructive for most game. Paint case heads with nail polish to identify the loads, or, as loading density is quite low, use W-W cases. Some shooters may prefer both bullets, which identify the loads. The Kay-Chuk doesn't replace the .357 and .44 Magnums

loaded with Jugular bullets in my handgun battery, but supplements these big bore hot-shots.

Dealers may not stock the Revolver Bullet for a while, but they can be ordered direct from Sisk Bullet Co., Iowa Park, Texas, at \$4.20 per 100. Ralph Sisk is a shooter's shooter, hunter and experimenter, a pioneer in fine custom .22 bullets he started selling nationally in 1932, when most of us had to use factory pills and like 'em. Sisk bullets made an immediate hit with shooters and on targets. He supplies 24 different .22's and three .17's, the largest small bore variety of any maker.

Those who send their K-22 guns to Lakeville Arms, Lakeville, Conn., for a \$40. conversion, or order a new gun at \$113., will receive the latest loading data with pressure and velocity. As the gun is so easy and economical to load for precision shooting, I'll always have the latest data. Inquiries on loading and ballistics can be sent to me in Saint Jo, Texas, with a stamped, addressed envelope, please. Inquiries on the guns or bullets should go to the makers, as I have no commercial interest in either firm, and do not sell guns, bullets or loads on mail order. However, mail order business sounds like a good idea, and you may see my ads in this magazine someday!

THE RIFLE WAS NO MYTH by Alfred K. Friedrich

History has always been my favorite reading. I find as many tense moments from events that really happened, as from the wildest yarns that were ever written by E. Phillips Oppenheim.

In reading the history of The American Revolution I find that where the Americans tried to meet the British on British terms, they did not do so well. When the Americans forced the fighting on their own terms, they won.

Take the battle of Long Island: Bayonets or no bayonets, the Americans would have been routed as they were outflanked. Brandywine and Germantown were the same story.

Now let us look at the other picture: Oriskany was fought with the rifle.

While it was not an overwhelming victory for the Americans, it sent St. Leger and his troops back to Canada, and Burgoyne lost an expected reinforcement.

Now let us look at the other picture: Oriskany was fought with the rifle. While it was not an overwhelming victory for the Americans, it sent St. Leger and his troops back to Canada, and Burgoyne lost an expected reinforcement.

The battle of Saratoga was the turning point of the war. Had Burgoyne succeeded in cutting the colonies in two as planned, the Colonies would have been in desperate straits. The turning point in that battle or rather in the series of skirmishes that bottled up Burgoyne was the stopping of two attempts by the British to break through to the south. Both of these thrusts were stopped by Morgan and Dearborn's riflemen. I quote from "Lexington to Liberty" by Bruce Lancaster.

"A strong infantry picket in faded scarlet coats poured out of the woods and took open order near the Freeman cabin, and nosed eagerly ahead. There was motion under the trees to the south where vaguely seen men in fur caps and long rifles were gliding. Somewhere among the dense boles an unearthly gobbling sound broke out, thick, throaty, and somehow carrying. Then the south woods echoed to the sharp crack of rifles. **Every officer** in the picket was struck down. Sergeants and privates toppled and the clearing was suddenly dotted with lithe men in hunting shirts rifles ready. Daniel Morgan's men had struck the first blow. The rush of the rifles, probably not over a company strength, carried them across the clearing where they collided, almost fatally, with main body under Burgoyne. They managed to break off, fled to shelter of the south woods, and the bulk of the British command occupied the Freeman fields, which ran east and west some three hundred and fifty yards. There was no enemy in sight, but the eerie, nerve racking gobble wailed among the trees. The sound would probably have lost none of its chilling mystery had the British known that it was Dan Morgan's own highly individual way of rallying his companies, many of whom had been badly scattered in their march through the woods.

"The south woods were no longer empty. More and more fur caps and hunting shirts filled the gaps between the trunks. Men with slung rifles could be seen climbing squirrel like to the upper branches. Rifles flashed again, were joined by the duller tones of muskets as newcomers with a uniform coat here and there, closed up with Morgan.

"It was worse than an awkward situation for a commander trained in formal war. There was nothing solid to strike against, no way of estimating the strength of the enemy. Nonetheless, Burgoyne faced the swelling fire calmly and ordered the signal guns to be discharged to tell Frazier on the right and Von Diesel on the left that the grand march had begun. Actually he had reached the high water mark of the invasion. Never would an Englishman or Brunswick pass the southern edge of the Freeman farm.

"Burgoyne's men firing as best they could at tree masked targets suffered heavily, especially the 62nd Wiltshires. Lieutenant James Hadden and other officers of the Royal Artillery brought on their guns. Marksmen in the trees shot

down the gun teams, picked off the cannoneers and gunner officers before a piece could be loaded. There was a sudden rush of infantry to the shelter of the north woods, leaving the guns silent. Morgan's men and Joseph Cilley's New Hampshire Continentals swarmed into the open, only to find the picture exactly reversed. Now the British were firing from cover on men in an exposed rolling meadow. The turkey called gobbled out its demoniac message, and the field was silent save for the dull thud of boots as the Americans yielded the ground and the British reoccupied it.

"Thus the pattern of the day was set. For three hours and more the scene repeated itself, with the two forces driving each other over the trampled ground. British losses mounted alarmingly. Of the gunner officers only James Hadden remained alive. The infantry lines closed and closed as gaps were torn in their ranks. Companies were melting to platoons. Weary, hungry and bewildered, dressed in grotesquely patched clothes that might well have stifled the last spark of regimental pride, the British Officers and men were magnificent. They gave ground with snarling reluctance, drove forward again in solid shouting rushes over the heaped scarlet bodies that marked an earlier stand. They stood unflinchingly to face the blizzard of aimed rifle fire that was to them almost a new form of warfare.

"They had seen rifles before, some of them had faced Morgan's men along the Boston lines. But now for the first time rifles were used properly against regular troops. When the British went in with the bayonet (that move that had been so fatal to the riflemen on Long Island) Morgan's companies melted away into the woods where pursuit was impossible. They took their time about reloading and came back to their posts at the edge of the clearing. They fired carefully at the trim ranks of the British companies. They picked off **officers**. Mounted aides bearing orders were brought down at once. And yet Burgoyne's men broke only under heavy pressure."

On October 7th Burgoyne made another attempt to break through. That fight was practically a repetition of the earlier attempt. The Americans smashed the British left. On the right Morgan's men gave way before the British bayonet charges only to come back and stop a real break through. Frazier, the British officer on the right, inspired his men. It looked as though they might win through after all. Morgan called to Tim Murphy, one of his best shots. "It is a shame to kill so brave a leader, but this is war." "Pick him off." Frazier fell soon afterwards. With their leader gone the British attack stalled on the right. Morgan sent Henry Dearborn's company around to Balcarre's rear. That completed the route, no troops could stand that rifle fire. The Germans did not even stop at trenches. They even shot their commanding officer who tried to rally them.

Historians do not give Gates much credit for the final victory. Perhaps he was wise after all to leave the fighting to better men than himself. Dan Morgan and Henry Dearborn were standouts. With them stood John Glover, William Whipple and John Fellows. John Stark came in at the last moment to stop the retreat to the north.

We come now to the War of 1812. Everybody knows how the riflemen under Jackson stopped the British at New Orleans, but few know of an engagement, little more than a skirmish, that stopped the British attack on Baltimore. Had that attack succeeded, the Colonies would have been back under the English thumb.

The British naval attack had failed to silence Fort Henry. American gunners transferred to the fort from the privateers bottled up in the harbor had stopped the British Mortar Boats. The fort however could easily be taken from the rear. Smith who was in command of the American defenses had judged correctly where the British would attack. He dug his trenches accordingly. When the British Army started their advance, Smith sent a screen of riflemen to give the British a taste of what they could expect when they hit the main body. These riflemen had orders to do as much damage as possible, but to retire when the British pressure became too great. The riflemen carried out these orders. They killed **half** of the British officers including the commanding general, inflicting twice as many losses as they sustained. The remaining British officers lost all their desire to get in range of those deadly rifles. They held a council of war and decided that it would be impossible to storm the American trenches without help from the fleet. They went back to their boats.

When the news of this failure reached the negotiators at Paris the British representatives signed the peace treaty.

THE BEAR CUB SCOPES

by
Colonel Townsend Whelen

The Redfield Gunsight Company have taken over the manufacture, distribution and sale of the Bear Cub line of telescope sights from the Kollmorgan Optical Company. This seems a move in the right direction as Redfield should be able to handle them with a better understanding of the rifleman's needs than a purely optical organization.

I am very familiar with these excellent scopes. I have owned five of them for a long time, four in 4-power, and one in 6-power, all mounted on dependable rifles, and I have fired thousands of rounds from them in target and game shooting. I am able to speak only as a layman as to their optical qualities, but they do seem to me to be the equal of any other scopes in these respects. The 4-powers have a field of view of 30 feet which is ample for woods hunting because when one throws his rifle to his shoulder he invariably finds the target in the field and can quickly bring the reticule to bear on it, even for shots at running game close by. The field is wonderfully bright and with no distortion whatever. But the 6-power scope seems to be in a class by itself. The brightness and resolving power are superb so that I have come to prefer it to my best 7-power binoculars for general observation and searching the country for varmints.

For the past two years the aluminum tubes of Bear Cub scopes have been given a new coating known as "Tufcoat," a gray-black finish, very attractive, that does not reflect light and is so tough that it can hardly be scratched with a file; very different from the finish on all other aluminum tube scopes that are so easily scratched and soon disfigured.

(Continued on Page Eight)

The Bear Cub Scopes

(Continued from Page Seven)

But it is in their internal reticule adjustment that these scopes seem to me to be much superior to all other hunting scopes with similar adjustments that I am familiar with. The dials are graduated clearly, simply and unmistakably in lines that have an adjusting value of exactly one minute of angle. There are no "clicks" so these graduations are easily subtended to adjustments of mere small fractions of a minute, and the zero is clearly marked on this scale and the base so that the graduations can be counted and a record made of the adjustment. The graduations are so plain that they can be seen in poor lights—all very different from the puzzling and faint graduations on most other dials.

Moreover the reticules on all five of my scopes respond precisely and dependably to movements of the dial, there being no lost motion or backlash to the movement so that one can depend on them as target shooters depend on the double micrometer external mounts on their target scopes. You can record the adjustments for various ranges and loads, and turn from one to the other and back again with complete reliance.

This is so different from the internal reticule adjustments of all other similar hunting scopes with which I am familiar. I have by no means become familiar with all makes of such scopes, but all the others that I have used have been more or less deficient in these respects. In sighting in and making necessary adjustments with the others it is common experience for the reticule seemingly not to move, and the center of impact not to change on applying a needed correction, even a couple of times, and then to have the adjustment change twice the amount needed, and never come back exactly to the first adjustment.

Twice I have made what I call "traverse targets" with these scopes on my .270 rifle and on my .222 Rem. rifle. I fired five shots at 100 yards, bench rest, with the zero adjustment, then changed the dial 3 minutes right and fired another group, then 3 minutes up, then 3 minutes left, and finally 3 minutes down to the original zero adjustment. The targets show the four groups forming a perfect square three inches apart, and the final five shot group was exactly superimposed on the first group. A most convincing test which I do not believe any other scope that I am familiar with will pass satisfactorily. Thus on my .270 rifle I have determined and recorded the adjustments for the big game load, the varmint load, and the small game load. I have had the Bear Cub scope on this rifle longer than on any other, and fired it more, and always these three adjustments are right on the dot.

Many sportsmen, who are not exactly riflemen, seem to be satisfied with a scope with which they can eventually get in adjustment for just one load and one distance, even though it takes the expenditure of a lot of expensive sighting shots to finally arrive at the required adjustment. But the real rifleman can fully appreciate the convenience and reliance of adjustments that seemingly are a characteristic of these Bear Cub scopes.

Several years ago Mr. Kollmorgan told me that the reticule adjustment mechanisms on these scopes were made with all the nicety commonly bestowed on the finest machinists micrometer cal-

ipers, and that was one of the features that contributed to the sales-price of Bear Cub scopes. Now Redfield tells me that in taking over these scopes they have been amazed at the small manufacturing tolerances prescribed, but that they fully intend to keep up these tolerances, and hence the quality of these fine scopes.

THE TOURNAMENT CIRCUIT

FLORIDA TOURNAMENTS

STATE SMALLBORE: Marty A. Washington, 18 year old Miami Junior, is the 1958 Florida smallbore rifle champion. He won three of four iron sight matches to take the iron sight aggregate with a 1595-109. He did not win any scope sight matches but dropped only four points to finish in that aggregate as runner-up, only three points behind the defending champ, Dr. F. P. Archer of Homestead. Archer's iron sight shooting was weak and his runner-up score of 3186-220 was outclassed by Washington's 3191-219.

Thirty-nine shooters representing all of Florida, more than a 50% increase over 1957, competed in the matches sponsored by the Sunshine Rifle and Pistol Club at St. Petersburg. Incidentally, the 1959 Mid-Winter Smallbore Tournament, sponsored by the Sunshine Rifle & Pistol Club, will be March 10th thru 13th.

HIGH-POWER: Forty-five competed in the .30 caliber matches sponsored by the Sunshine Rifle & Pistol Club and Florida National Guard 116th Field Artillery on the MacDill AFB range, August 17th.

Joseph J. Ring, Gainesville, Fla. won the 80 shot aggregate with a 370-21. His only match win was at 200 yd. rapid with a 100-12V. James L. Elkins, NAT Center, Jacksonville, won the 300 yd. rapid fire with 95-10V and was runner-up in the agg. with 369-30V. Clifton T. Huston took the offhand match with a 92-7V and Glenn M. Huston won the 600 yd. prone match with a 95-7V—both Hustons from St. Petersburg.

OREGON HIGH-POWER CHAMPIONSHIPS

The Oregon State High-Power Rifle Championships at Redmond, Oregon, on August 16-17, drew the largest entry in many years—a total of 175 shooters from Oregon, California, Washington and Alberta, Canada. Top ranking shooters in the matches were:

Offhand at 200 yards—C. Ruegg, Portland, Ore. 98-8V; L. Huskey, Fort Lewis, Wash. 96-11V; G. Pelker, Bend, Ore. 96-9V.

Rapid fire, 10 shots at each 200 and 300 yds.—S. Borjesson, Bangor, Wash. 100-15V; Harry Luebben, Portland, Ore. 100-13V; A. Lencioni, Fort Lewis 99-13V.

Prone at 600 yds.—P. Robinson, Roseburg, Ore. 100-17V; George Clapp, Bend, Ore. 100-12V; Marlene Bellinger, Seattle, Wash. 100-8V.

Prone at 800 yds.—Clarence Styer, Seattle 50-8V; S. Borjesson 50-7V; Karl Kepp, Seattle 50-7V.

Governor's Trophy Match, 10 shots each at 200 yards offhand, 300 yds. prone rapid fire and 600 yds. prone—Miralotte

Ickes, Berkeley, Calif. 147-14V; George Clapp 147-9V; Raymond Ickes, Berkeley, Calif. 145-13V.

Grand aggregate (not including the 800 yd. match)—George Clapp (new state champion) 635-49V; Miralotte Ickes 629-59V; Malcolm Dalton, Fort Lewis, Wash. 627-52V.

CONNECTICUT SMALLBORE CHAMPIONSHIP

John J. Crowley regained his Connecticut smallbore rifle championship title by a masterful day's shooting on the Blue Trail Range, September 21st. He won two of the four matches with possible 400 scores, dropped one point in the 100 yd. stage of the metallic Dewar to take third place, and his 400-33 was good for fourth in the 50 meter any. His championship aggregate 1599-125 topped runner-up Kermit Montross' 1597-102. Montross won the metallic Dewar with 400-26. Laurence F. Moore, Aberdeen, Md., who placed 6th, 3rd, 9th and 11th in the fired matches, finished third in the aggregate with 1596-112. George Snellgrove, Bergerfield, N. J. and Walter Tomsen (the defending 1957 champ), Flushing, N. Y., were fourth and fifth with 1595-111 scores, Snellgrove having more X's at 100 yds.

Eighty-three fired the championship matches plus 21 juniors who fired only the junior match.

CONNECTICUT BIG BORE LEAGUE

The Sept. 14th Conn. Big Bore Rifle League match had 344 shooters representing 34 teams competing. Two shot possible 125 scores for the course of 5 shots in each prone, sitting and kneeling and 10 standing positions, all slow fire on the A target at 200 yards—Fred Willing leading the Roslyn (N. Y.) team with 19V's and R. Wilkinson leading the Bridgeport team with 15V's. A. T. Reynolds of the Magnum team fired 124-19V and Martha Ventres shot 124-14V for Rippowam.

Bridgeport was top team with 612 of a possible 625 for its five high scorers. Magnum scored 611, Middlefield 608, Roslyn 607, Rippowam 604-59V, Tri-Club 604-58V, and Springfield, Mass. 600. Middlefield's 6th ranking shooter fired a 121-12 and the next five ranking shooters all had 120 scores—that is team "depth" strength!

Some handloaders credit primers as an important factor in ammunition accuracy; others do not. We wonder if the primer variables may not compensate or cumulate with other cartridge variables, or even mechanical variables in arms, to give good or poor accuracy results.

There are so many variables affecting accuracy of rifled arms, both hand and shoulder weapons, and so many of those variables which generally tend to compensate one another, that it is difficult to isolate and study any single one of those variables, as many experimenters have found out. We wonder if there may be **related groups** of variables which may best be worked with.

NEW ELECTRIC DRIPPER

By Kent Bellah

The handiest gismo created by Ted Smith, Shooters Accessory Supply, Box 205, North Bend, Oregon, is an Electric Dropper, \$6.50 at most gun stores. Like the famous Little Dropper by the same inventor, it drips powder in the scales to bring charges to exact weight, but is faster, better and more versatile. Touch a button and a buzzer vibrates powder from a tube. Turning the top knob adjusts from a fast flow to a mere "dribble." It starts and stops instantly for easy, accurate operation. It works with equal efficiency on 4 to 12 volts, such as a long life lantern battery. Best deal is the 6 to 12 volt transformer for your doorbell, or available locally at about \$1.79. My transformer is mounted under a shelf with a cord to plug in at the nearest outlet, and has a standard outlet to plug in the Dropper. The entire transformer, cord, outlet and Dropper can be moved anywhere desired. It's real neat!

Directions fail to mention the important fact that full charges can be dripped quickly without a measure. At fast flow, 12 grains 2400 or 21.5 grains 4198 can be dripped in 5 seconds, fast as I can operate. Using the excellent Webster RWC scales with Webster Funnel Holder, a charge is weighed while I put a charged case in a loading block and a new hull under the funnel. This routine puts precision loads on a production basis. It's especially good for sticky pistol powders that do not meter well. If a charge of say 2.7 grains Bullseye is an accurate .38 target load, I often recommend 3 grains to avoid throwing squibs, but exact charges can be dripped with speed.

Besides fast, precision loads for production, the Electric Dropper is wonderful for lab quality test ammo with various charges. It was invaluable for hundreds of Kay-Chuk and Hornet test loads varying from 1.5 to 12.5 grains of powder. Hornet loading blocks can be made economically with the \$1. plastic cartridge boxes made by Brad's Gun Shop, Lake Jackson, Texas, available in many stores. Cut a 50 hole .38-222 box in half with a sharp, long blade knife, which cuts cleaner than a power saw. Put the top half in the lid, which is also cut down, and you have two permanent, compact blocks costing only fifty cents each. A .44-45 box is fine for .222 to 30-06 cases, or can be split for .38's or .45 ACP, and are much less bulky than wood blocks. The boxes are good for the original purpose, which is to store or carry ammo.

The Electric Dropper may "walk" on a smooth surface, due to vibration, and is a bit low for most scales. I solved both problems permanently by sawing $\frac{1}{8}$ " deep parallel cuts the length of a $2\frac{1}{2}$ x 3" block of $\frac{3}{4}$ " wood, to hold the legs and increase the height. I cemented a strip of $\frac{1}{8}$ " sponge rubber to the base. A cast lead base would probably work as well. The powder hopper is about $1\frac{1}{4}$ x 3 x $1\frac{1}{4}$ " deep, plenty large for individual use, or to bring thrown charges to exact weight. I suspect custom loaders who cater to the carriage trade with weighed charges will add sideboards for mass production work, and will use the units in batteries with their presses. It's a real practical piece of equipment for any handloader. Another use that isn't in the directions, it's handy to shake down the powder in a charged case to get in a grain or two more, for

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BEAR CUB

Scope

Now Redfield produces the scope that gives hunters the greatest possible accuracy and dependability! For several years we have wanted to have such a scope to match our famous mounts. Extensive analysis by our technicians and thorough field testing by our hunting experts proved that one scope—THE BEAR CUB SCOPE (formerly Kollmorgen)—offered more "wanted features" than any other.

Redfield Bear Cub 2 $\frac{3}{4}$ X, \$54.⁵⁰ 4X, \$64.⁵⁰ 6X, \$82.⁵⁰

Check these exclusive quality features:

Self-aligning optics: Cross hairs always remain centered.

Rugged backlash-free dial adjustments for perfect accuracy.

The brightest, widest field of view.

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Scope is compact, lightweight, weatherproof.

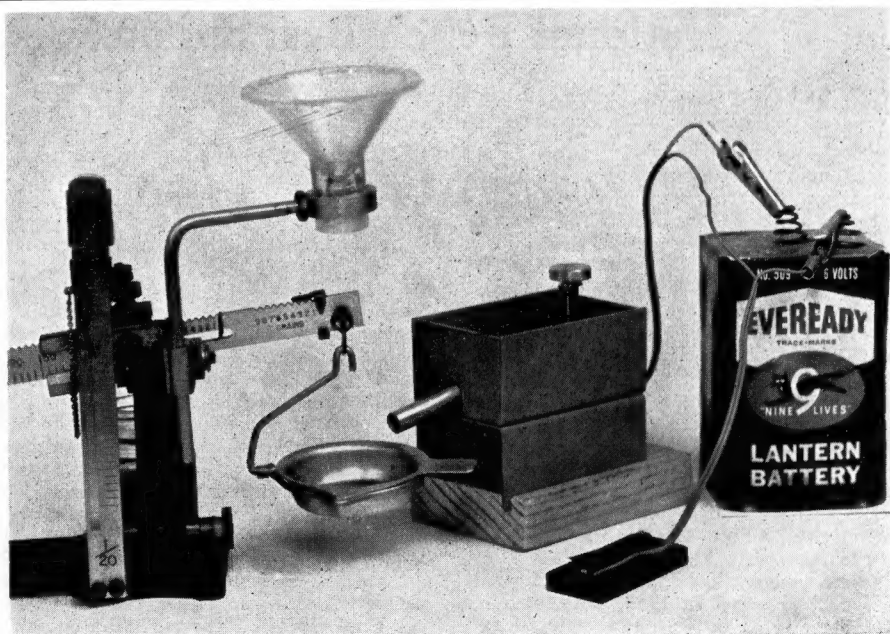
REDFIELD GUNSIGHT CO. 1311 South Clarkson, Denver, Colo.
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See your dealer or gunsmith or write for free folder.

certain loads. Just hold the nearly full case against the Dropper snout and touch the switch for 3 or 4 seconds. This is better than tapping or tamping.

Many handgunners are searching for better resting methods which will allow them to better test their guns and ammo for pure accuracy. Any proven ideas along that line would be welcomed by many shooters.

SHOOT! "Harvey Jugular Jacketed" & "Harvey Prot-X-Bore" Zinc Base Swaged Handgun Bullets. Moulds, Swaging Dies 38, 357, 44 cal. & 45. .224 Kay-Chuk Handgun Conversions. "Harvey .429 Maglaska" Rifles. Send 25¢ in coin or stamps for information including loading tables for handgun calibres.

"R"
LAKEVILLE ARMS INC.
Lakeville, Conn.



The Electric Dropper



Competitors and guests at the 1958 National Bench Rest Championships on the John Zink Range near Tulsa, Oklahoma, on Championship course. Note how some of the wind flags are standing out straight and others are drooping—it was a puzzling range.

National Bench Rest Shooters Association, Inc.

NBRSA DIRECTORS' ANNUAL MEETINGS

The 1958 NBRSA Directors' annual meetings were held in Mr. John Zink's ranch clubhouse on September 24, 25 and 26. Irvin M. Mohnkern was re-elected to serve as President in 1959, Paul O. Gottschall was elected as Vice President for 1959, and P. H. Teachout was re-elected to serve as Secretary-Treasurer.

Annual membership dues had previously been increased to \$5.00, effective October 1, 1958, by mail vote. At these meetings it was voted to increase the Life Membership fee from \$50.00 to \$75.00, effective January 1, 1959.

The bulk of the Directors' work was on the association's activity program, chiefly on the competitive program. The result is the broadest program of shooting activity to date, BUT on a trial basis for 1959.

Two classes for heavy bench rest rifles will be tried in 1959, separated by resting methods into an unrestricted and a restricted method of resting. Match sponsors may elect to program either or

both of these classes for their shoots.

Two classes have been approved for Varmint Rifles, heavy Varmint Rifle which will be essentially the same as in 1958, and light Varmint Rifle with 10 lb. overall weight limit and max. of 12X scope. Resting methods for Varmint Rifle have been revised and defined.

An entirely new **SPORTER** Rifle class has been adopted for a year's trial. This will be for rifles of .23 caliber or larger, 10 lb. over-all weight and scope limited to a max. of 10X.

More details on the shooting program and rifle classes will be published later. Since these programs and rules were adopted on a trial basis, it was voted **not to recognize** any small group or aggregate national records during the year 1959.

The 1960 National Championship Shoot was awarded to the Mid-Continent Region and the present expectations are that it will again be at Tulsa.

The 1959 National Championship Shoot will be conducted by the Pine Tree Rifle Club at Johnstown, New York and

probably for a period ending on Labor Day.

Robert W. Smith Is 1958 National Bench Rest Rifle Champion

(Continued from Page Four)

Eastern Region. Both the championship aggregates and the sub-aggregates of the championship course were the largest since the first National Shoot in 1954. That is no reflection on the skill of the shooters or the competitive effort, but a result of the weather conditions prevailing during the championship matches. Considering the conditions under which they were fired, the top ranking groups and aggregates were remarkably good ones.

We heard nothing but praise for the range set-up and appreciation for the work that had gone into its building. The range site is made available by Mr. John Zink, Tulsa manufacturer and sportsman. We believe that Mr. Zink also supplied a large part of the material for the construction of the range, as well as considerable equipment and the



September 27th. In the background the target crew is changing targets between matches of the 100 yard stage of the National e to shoot on.

services of his ranch foreman, Arnold Robinson, for the construction work. The National Guard Engineer Company in Tulsa supplied heavy equipment and manpower for a considerable part of the heavy construction work, as part of their training program. Members of the sponsoring Tulsa Bench Rest Rifle Club must have spent a great many hours fabricating and installing the range equipment, "polishing" the range for the big shoot, and all the preparatory details for a smooth running match. Special mention is due for the Tulsa Club president, A. L. Day, who headed planning for the whole program and spent practically full time for several weeks before the shoot on preparatory work for it.

The chief criticism we heard of the range plant was of the sanitary facilities provided, and that is a valid criticism for all too big a portion of all shooting ranges the country over. They were primitive, inconveniently located and not too clean.

Some of those observing the shooting but not competing were: as previously mentioned, Al Freeland, shooting equipment manufacturer and dealer as

well as smallbore rifle competitor, and Mrs. Freeland from Rock Island, Ill. M/Sgt. Glenn C. Baker from ordnance section of the Advanced Marksmanship Unit at Ft. Benning, Ga. was observing throughout the shoot period. Col. E. H. Harrison of NRA was on hand as reporter for the American Rifleman. Gunsmith and smallbore rifleman Walter Womack, Shreveport, La., was one of a trio from Louisiana getting first hand ideas in the hope of promoting more rest shooting in their state.

We believe Donald Smith, National City, Calif., is the first person ever to make the "Top Twenty" in National Match competition shooting a 6 mm rifle, and Don has done it only after persistent effort in past National Shoots. He shoots a 6 mm utilizing the Don Wasp case, in a Douglas barrel, 28" X 1¼" with .2435" groove diameter, fitted to a Mauser 98 action with Bellows sleeve and stocked by K. E. Smith, Lakeside, Calif. In this barrel he shoots 70 gr. 7S bullets of .2440" diameter, home-made in B&A dies. He uses a duplex load of 18 grs. 7198 and 10 grs. 3031, using a 27 m/m flash tube. He was also using

RWS-SINOXID primers.

When I get the complete results bulletin, with registration and equipment data cards, I'll do some over-all summarizing, as I have done for past National Shoots.

P. H. T.

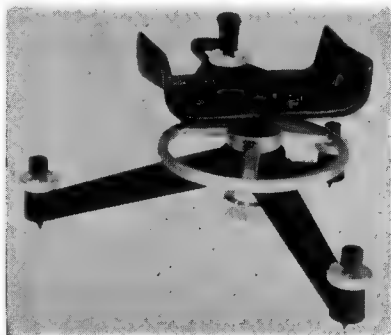
A 'BLIND' MATCH

At Tulsa, Dr. Rod Janson, Seattle, Wash., an advocate for unrestricted rests for competitive shooting, proposed a demonstration match to be fired under the following conditions, with the so-called "back-to-battery" rests.

Rifles on rests be set up and sighted in on the sighting target, using the scope sights. Then, rifles to be elevated by the rests to have a desired point of aim on the record target, and the dust caps be screwed onto all scopes to remain there during the record firing—rifle alignment for record firing to be controlled entirely by the mechanical rests.

It was arranged to fire this match after the scheduled 5-shot matches at 100 yards on Thursday afternoon, Sept. 25th. The match to be 10 record shots in 10 minutes (after sighting and inspection of

(Continued on Page Twelve)



The new 1957 National B. R. Champion Harold Hale used a Beecher Rifle Rest. The original light weight tripod rest. Eight years in use coast to coast and abroad. Super Model still \$22.50. New Custom Model illustrated \$27.75. "Apache Jack" Wheel fits all older models \$4.75. All Postpaid and insured in U. S. A. No C. O. D.'s.

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I am still getting Weber actions but slow.

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A "Blind" Match

(Continued from Page Eleven)

scopes and record targets) at 100 yards.

Weather conditions for shooting were best on Thursday that they were any day during the match period, but there was some variable wind. The match was fired just after mid-afternoon. Fifteen entered this demonstration match. Two of the shooters, Ed McNally and Lawrence Rucker, have used their rest successfully in competition this season but have advocated that they be barred in competition. The balance of thirteen either favored unrestricted mechanical rests for competition or were more or less neutral. The groups fired are listed in order of size as follows:

Clyde Yockey, Penna.	.262"
W. M. Brown, Ohio	.342"
Paul Gottschall, Ohio	.458"
Dr. J. W. Clark, Colorado	.480"
Lawrence Rucker, Ohio	.510"
Ed McNally, New York	.550"
Dr. Rod Janson, Washington	.568"
George Kelby, Ohio	.590"
Roy Norman, Washington	.600"
Clair Hollingsworth, So. Dak.	.620"
Roy Meister, Washington	.665"
Orren Bellows, Penna.	.698"
Dale Apperson, Kansas	.730"
Earl Auernheimer, Kansas	.830"
W. M. Starks, Kansas	1.045"

The size of the groups fired covers just about the complete normal range that might be expected in a normal match between three to four times as many competitors, which would indicate that more than any old robot rest is needed in order to win matches.

Clyde Yockey stated that this was the first time that he had ever tried to fire a match with his rests without checking the aiming of each shot. His winning group indicates that he had an efficient set of rests, a very excellent rifle-ammo combination, observed his conditions for firing carefully—and was perhaps a little bit lucky. Dr. Clark is quite new in competitive rest shooting but in the very few matches he has fired in he has done well.

Comparative-wise, two days later in the 100 yard matches of the National course, under much more difficult conditions, W. M. Brown made a second match place with a .530" group and another second place with a .490" group. That same day, Paul Gottschall made a third place with a .545" group, a fifth place with a .612" group, and was second in the 100 yard aggregate with a .575" average. None of the other 13 placed in the top five in either match or aggregate of the 10-shot matches of the National course. In addition to Brown and Gottschall, Yockey (19th), McNally (9th), Kelby (12th), and Hollingsworth (18th), placed in the Top Twenty in the National aggregate. Bellows placed 27th and Apperson 29th.

Judging from this demonstration, plus other tests I have seen and heard about, and observance of match results bulletins, this writer concludes that excellent rests that best suit the individual shooter are but one item of good equipment that can assist in winning matches, but not the most important item by any means.

Incidentally, Gene Beecher was using and demonstrating a mechanical rear rest controlled in both vertical and horizontal direction by a single lever with a turning grip like the handlebar control on a motorcycle. It is the slickest, fastest and most practical mechanical rest gadget this writer has seen to date.

PHT

BENCH REST MATCH RESULTS

AUGUSTA, OHIO

Shooting against a field of 27 other competitors at Reed's Run Rifle Range, Augusta, Ohio, August 30-31, Omar Rinehart of Salem, Ohio, won the NMC aggregate with a .680 moa. Rinehart won only one fired match, at 200 yds., but was second in the 100 yd. agg. with .500 and third at 200 with .856. From the equipment information sheet it appears that Rinehart shot two rifles:—his T&R .219 Wasp in 30" Hart barrel on FN action with Unertl scope, and a .222 Magnum in 25½" Hart barrel on FN action, gunsmithed by Glenn, and Lyman scope. He shot 55 gr. bullets home made

in B&A dies in both guns, with 26 grs. 3031 in the Wasp and 25½ grs. Ball powder in the .222 Magnum.

Ralph Stolle, Landover Hills, Md., was second at both 200 yds. (.800 moa) and the NMC agg. with .697. He shot a .222 in 30" Johnson P. T. barrel on Culver action with Unertl 24X scope, and load of 20.8 grs. of 4198 and Culver 55 gr. bullets. L. S. Glenn, Akron, Ohio, didn't win a fired 10-shot match and only placed in two (at 200 yds.), didn't place in either sub-aggregate but was third in the NMC with .713 moa. He shot a .222 Magnum cartridge in 28" Douglas barrel on Rem. action and a 24X Unertl scope, with .22 grs. 4198 and Brown bullets.

James D. Whetstone, Parkman, Ohio, who has been shooting in registered matches only a year, won the 100 yd. 10-shot agg. with .483. Paul Gottschall was 3rd at 200 with .501. George Kelby, Rittman, Ohio, in his second year of competition, won the 200 10-shot agg. with a decisive .769 moa.

Three shot the full program with Varmint class rifles, all shooting .222 Sako rifles. Parker Rollins, Lincoln Park, Mich. was high for the NMC agg. with 1.01 moa.

CUSTER, SOUTH DAKOTA

Thirteen shot in the matches at Custer, S. D. August 16-17. Shooting 10-shot matches for the NMC agg., Bruce Pheasant, Buffalo, Wyo. was 2nd in the 100 yd. stage with .570, 3rd at 200 yds. with .9527 to win the NMC agg. with .7615 moa.

Harold Bing, Newcastle, Wyo., was down to 6th at 100 yds. with .644 but won the 200 yd. agg. with .884 to put him a close second in the NMC agg. with .764. Jack Williams, Casa Grande, Ariz., was 3rd at 100 yds. with .602, 2nd at 200 with .9515 and 3rd in the NMC with .770 moa. Vivian Duncan, Lancaster, Wisc., won the 100 yd. agg. with .568. Charles Humberger, Keystone, S. D. was 4th all the way for a .8015 NMC agg.

The five top shooters all used the .222 cartridge, Duncan in Douglas barrel and the others Hart barrels. Bing, Humberger and Duncan shot the Sierra 53 gr. bullets and the other two home made bullets from B&A dies. Williams used 4198 powder, the others Ball powder.

Shooting five 5-shot matches at each 100 and 200 yds. in Varmint Rifle class, Jack Williams was 2nd at both 100 yds. (.570) and 200 yds. (.795) but won the grand agg. with .682 moa. Harold Bing was again out of the money at 100 yds. but won the 200 yd. agg. with .746 to give him 2nd in the grand with .692. C. C. Hankins, Buffalo, Wyo. won the 100 yd. agg. with .561. Bing and Williams shot .222 rifles with Hart barrels while Hankins shot a .219 in Douglas barrel. Williams used home made bullets from B&A dies, Bing the Sierra 53 gr. bullet and Hankins the Speer 52 gr. bullets.

Shooting a .257 CT sporter rifle with Douglas barrel on Rem. 722 action, weighing 9 lbs. 10 oz. with Stith scope, Carson Teaney, Rapid City, S. D., averaged .720 for five 5-shot matches at 100 yds., and a .7245 moa for five 5-shot matches at 200 yds. to win the grand with .7225 moa. He shot home made bullets from RCBS dies.

Jack Williams, shooting a 243 Apache in A&M barrel on Win. M/70 action weighing 9 lbs. 14 oz. with Bear Cub 6X scope, and load of 30 grs. 3031 with Sierra 60 gr. bullets, won the 100 yd. agg. with .609, was 2nd at 200 yds. with .9185 and 2nd in the grand with .764

moa. G. B. Baldwin, Buffalo, Wyo., shooting a 250/3000 in Christy barrel on Enfield action weighing 93½ lbs. with Weaver 6X scope, and load of 26 grs. Ball powder and Hornady 87 gr. bullets, didn't make the three high at either range (.7586 at 100 and 1.110 at 200) but did make 3rd in the grand with .934 moa. Harold Bing was 2nd at 100 yds. with .701 and 4th in grand with .990.

WINDSOR, ILLINOIS

A small entry of 8 doing some excellent shooting featured the Windsor Rod and Gun Club July shoot. Alfred Walters, St. Louis, Mo., won the NMC agg. with .4541 moa and the 200 yd. agg. with .4687. Al Roberts, Louisville, Ky., was second in the NMC with .4774. Harold Cole, Windsor, was 3rd in NMC with .5039 moa. Wm. Schellert, St. Louis, won the 100 yd. agg. with .4218, over Roberts' .4290, and his wife Barbara was 3rd at 200 yds. with .524.

All three NMC winners shot rifles with Schultz and Larsen actions, Walter and Cole with Holmes barrels and Roberts with a Childress barrel. The Schellerts shot Hart barrels, Wm. on S&L action and Barbara on Win. M/70 action.

WICHITA, KANSAS

Horace Powers, Okmulgee, Okla. won the NMC agg. at the Aug. 30 Wichita shoot with a .511 moa in a 10 to 20 mph wind. L. F. Carden was 2nd with .5247 and H. G. Baucher 3rd with .5315, both Kansas City, Kans. shooters. All three shot .222 rifles with load of 23 grs. Ball powder and hand swaged bullets. Powers and Carden shot Hart barrels, Powers on his own action and Carden on a Win. M/70 action. Baucher shot a Douglas barrel on Enfield action.

J. W. Mayer, Mission, Kans., won the Varmint Rifle class grand aggregate with .489 moa (5-shot matches), having .501 at 100 yds. and .478 at 200.

TULSA, OKLAHOMA

Shooting in a day time match at Tulsa, Sept. 7, Horace Powers won the NMC agg. with .600, taking the 100 yd. agg. with .487 and 3rd at 200 with .713. Dale Apperson, Wichita, Kans. was 2nd all the way with .511 at 100, .712 at 200 and .611 in the NMC. Ed Grishaw, Tulsa, was 3rd at 100 with .563, high at 200 with .671 and 3rd in the NMC with .617 moa.

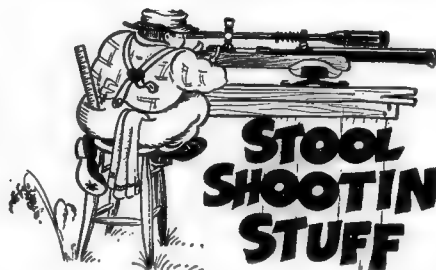
Apperson shot a .222 in Douglas barrel on S & L action with 23.6 grs. Ball powder and Ted Holmes bullets. Grishaw shot a .219 in Day barrel on Mauser action with 26.2 grs. 4895 and hand made 51.5 gr. bullets made in Bahler dies.

In Varmint Rifle class, shooting 5-shot matches, H. E. Cornelison had small average at 100 yds. of .698 and L. E. Cornelison (both from Seminole, Okla.) had small average of .668 moa at 200 yds. L. E. shot a BSA .222 and H. E. a Marlin .222. Both shot 23.5 grs. 3031 and Sierra 53 gr. H. P. bullets.

ILLINOIS STATE CHAMPIONSHIP

The 1958 Illinois State Bench Rest Championships at Greenup, sponsored by the Cumberland Sportsman Club, on Sept. 13-14, drew a record entry of 26 from 7 states, making a 7 hour shooting day on the club's nice 10 bench range. Weather both days was clear but windy.

Paul Gottschall, Salem, Ohio, won the aggregate (NMC) with .473 minute of angle; Alfred Walter, St. Louis, Mo., 2nd with .558; Omar Rinehart, Salem, Ohio, 3rd with .587; Cline Deere, Washington C. H., Ohio, 4th with .653; and Ernest Detmar, Bloomington, Ind., 5th



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CRAWFORD H. HOLLIDGE

MARSTONS MILLS

CAPE COD

MASSACHUSETTS

with .692. Bob Sherer, Mattoon, Ill. was high resident shooter with .718.

Eight of the 26 shooters were using Ted Holmes Gun Shop barrels, including the runner-up Alfred Walter and 4th place Cline Deere. Three were shooting Childress barrels, including 5th place Ernest Detmar. Gottschall was shooting a Hart barrel and Rinehart a Douglas. Those shooting the .219 Don out-numbered the .222 shooters at this match, 18 to 9.

EASTON, OHIO

Twenty one shot the national match course in the August match on the Chipewawa Rifle Club's Easton, Ohio, range in a long 9 hour day. Seventeen shot the heavy rifles and four shot Varmint rifles.

Omar Rinehart, Salem, Ohio, won the NMC agg. with .5135 m.o.a., and the 200 yd. agg. with .4910. W. M. Brown, Augusta, Ohio, won the 100 yd. agg. with .4802 and was runner-up in the NMC with .5624. Lawrence Rucker, Akron, Ohio, was 3rd in the 200 yd. agg. with .6360 and 3rd in the NMC with .5891.

Harold Campau, Wyandotte, Mich. won the Varmint Rifle Agg. with .8451 m.o.a. and Raymond Novak, Highland Park, Mich. was runner-up with .8622. All the Varmint rifles were .222 cal. Novak shot a custom rifle with 24" Apex barrel on Mauser action weighing 12½ lbs. with Unertl 16X scope. The other three shot Sako rifles weighing from 9½ to 11 lbs. with 20X scopes.

PLAINFIELD, NEW HAMPSHIRE

Following the suggestion of regular competitors from a distance, the Plainfield Rifle Club held their September match on Saturday afternoon and Sunday forenoon (20-21). Eleven shot on both days while one shot Sat. only and (Continued on Page Fourteen)

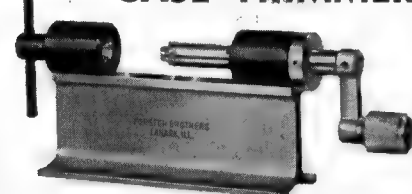
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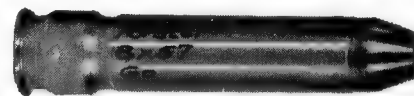
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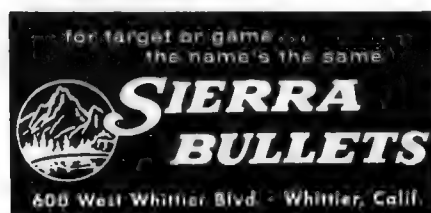
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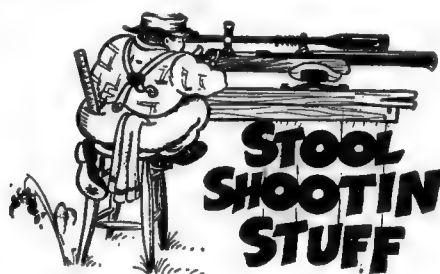
Bench Rest Match Results

(Continued from Page Thirteen)
another on Sun. only. The Club sponsored a chicken barbecue after the shooting on Sat. which was enjoyed by competitors and local people.

Crawford Hollidge won the aggregate for five 5-shot matches at 100 yards and five at 200 yards with a .3275 m.o.a. average and the 200 yd. agg. with .329. Alfred Glendening, Margaretville, N. Y., was runner-up in the grand with .3357. Howard King, Richfield Spa, N. Y. won the 100 yd. agg. with .296 and was 3rd in the grand with .3480.

At this match they shoot for score as well as group, counting the inner half-minute-of-angle ring as 10. Al Glendening won the 100 yd. score agg. with a possible 250 while Ralph Felter, Kelly Corner, N. Y. won the 200 yd. agg. with a 245 score.

After the scheduled matches on Sat. a two-man team match was promoted, both team members firing five shots on the same target for a single 10-shot group. Names of all competitors were put in a hat and the pairs drawn. Bob Stinehour and Phil Teachout, both shooting Stinehour's rifle and ammo, won this match with a .265" 10-shot group at 100 yds. Following that, a widest group match was fired—don't remember who did win that but the winning target had shots just perched on two diagonal corners of the borderline (going over the borderline disqualifies).



Dear Phil:

I know you have lots of copy for the forthcoming issue as a result of the Na-

tional Shoot so I think this letter should be a short one. I am sorry I wasn't among those present as I have no doubt you all had a good time and many pleasant gatherings. I thought of the fellows each day as the events occurred, and eagerly look forward to hearing the reports from those who attended as well as through your columns.

I have been busy getting my 7 m/m ready for the deer season and have developed a new bullet for it that shoots like a benchrest job, yet due to the cavity core, has the length characteristic of a 7 m/m bullet. It is light enough to have high velocity and if the cavity core causes it to expand as effectively as the 22 caliber model does on chucks, then it will be a very deadly bullet.

Speaking of bullets, Phil, I think we shooters often lose track of how good the bullets are that we are getting from such fellows as Speer and Sierra. A month or so ago, I tested out some of the new Speer models in one of my best rifles. Before I tested them, I weighed them and measured them, and before I ever went to shoot them, I knew they were going to do a good job. They are almost identical to those the boys have been making for themselves, and I have no doubt many shooters got excellent results from them in the matches.

We live in a great country where manufacturers strive to perfect their products, and some of them are very generous with the information which they publish as a result of their research. I particularly visualize as I write this, the great detail and thoroughness that was indicated in publishing Speer's two hand loading manuals. If a fellow would just sit down and study those as he would a text book, he would certainly find himself not only a better shooter but a good deal more intelligent hand loader. I used their Ballistic Calculator on several loads in different calibers and then went out to compare action results at 100, 200 yards, and 300 meters. The calculator knew what it was talking about as the drop and mid range trajectories worked out very accurately.

I have had a few letters from fel-



The 50 bench firing line at the Pine Tree Rifle Club range, Johnstown, New York, where the 1959 National Bench Rest Rifle Championships will be fired.

lows recently who received the impression that I was going out of the bench-rest game, possibly some of it due to the fact that I advertised some of my newest and best rifles. I still have others that are just as good and for sale and it really isn't necessary to have a dozen rifles to stay in the game. I did say at Johnstown that I probably would not be attending so many matches next year, and my comments were made mainly because of the expense and long distances I have to travel to attend so many matches. I imagine when Spring comes around that I will again get the fever and find it hard to wait for the opening of the season and I am sure by that time, I will not have sold my last gun.

Cordially yours,
Ernest Stuhlschuter

THE INFORMATION BENCH

The Information Bench service is available to all Precision SHOOTING readers. With your questions, send a large, stamped, self addressed return envelope for a reply. Selected questions and answers, covering as wide a variety of interests as possible, will be published in these columns. Address your questions to the following people.

Bench rest, varmint and hunting rifles, accessories, handloading, components and shooting methods—M. H. Walker, THE INFORMATION BENCH, RFD #1, Box 118, Mohawk, N. Y.

NRA and Free target rifles and shooting—Roy F. Dunlap, 2319 Ft. Lowell Rd., Tucson, Arizona.

Sporting handguns and loading—Kent Bellah, Saint Jo, Texas.

British arms and shooting—John C. J. Knott, 2226 North Euclid Ave., Tucson, Arizona.

Question: I have been told that the following 20 shot group has never been beaten: 200 yards, 20 shots, group .776 inch, Cal. .32-40, 200 gr. lead bullet (Pope design), 40 grs. FFG, Rem. 8½ copper primer, 1400 F. P. S., 20,000 P. S. I., Bench Rest, Pope barrel, Stevens action, fired by C. E. Rowland, Boulder, Colo. in 1906. Is this true? Seely Masker, New York

Answer: I cannot say whether or not the Rowland group has been beaten as no records are kept of 20 shot groups in official competition. However, it is quite likely that some one of the Bench Rest shooters has beaten a .776 200 yd. 20 shot group because the present record at 200 yds. for 10 shots is .402. A 20 shot group of the same quality would be approximately 25% larger. This would make it .503.

Since many Bench Rest shooters continually shoot better groups at practice than the existing records, it is quite likely that these same shooters under selected conditions could do better than the Rowland group. Since this letter will be published in the Precision Shooting we will no doubt have the above surmises substantiated. M. H. Walker

Question: Do you know of any attempts to use bullets of 70 to 75 grain weights in .224 caliber? It seems likely that many must have tried to use .224 caliber bullets with sectional densities comparable to those of larger caliber bullets. Indeed, why should it be necessary to go to the larger diameters to get the advantages of bullets with good sectional density?

If bench rest shooting has proved anything it is that the larger calibers are not likely to achieve the accuracy now fairly common with the .224's. Reams have been written about the possible reasons for this, but whatever the reasons may be, they don't change the results at the target. Your experiences with 6mm and .257 calibers as reported in the August "Precision Shooting" indicate the same trend.

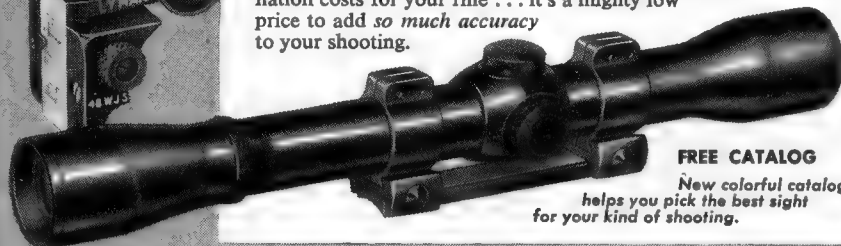


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The question has plagued me for many years, but I have not read or heard of any work in that direction—yet everyone who writes seems to extol the virtues of the 6mms over larger diameters, accuracy-wise.

Out here we have wide open spaces and wind. In addition to the long range bench rest shooting problem, the most common "varmint" target is one of the smallest, the western ground squirrel. To hit these animals consistently at long ranges requires precision shooting generally outside the capabilities of today's rifle and varmint cartridge combinations. This, even if we didn't have mirage to contend with.

A 70 to 75 grain .224 bullet with a decent point shape should outperform anything going today. Such a bullet is stable with a 1-in-12 twist, at least at the velocities I have tried it. I built my own accurate chronograph some 5 or 6 years ago and tests indicate quite respectable, if not remarkable, velocities with these long bullets. Chronograph reading are directly recorded and screens using a circuit-making scheme are spaced 50 feet apart for high velocities. Velocities so determined are assumed to be at 35 feet from the muzzle.

The results out of a 30-inch Douglas stainless barrel chambered for the Swift case (722 action) are as follows: 5-Shot Instrumental Velocity.

4831 Powder	Bullet	Velocity
40 gr.	63 gr. Sierra	3425
42 gr.	63 gr. Sierra	3597
45 gr.	63 gr. Sierra	3709
38 gr.	70 gr. Hemstead	2897
40 gr.	70 gr. Hemstead	3087
42 gr.	70 gr. Hemstead	3349
44 gr.	70 gr. Hemstead	3484
45 gr.	70 gr. Hemstead	3628

All these loads have also been tried with 75 grain bullets with no apparent pressure problems or instability.

So far I have tried only 100 each of 70 and 75 grain bullets. When they were nearly gone I discovered severe metal fouling in the muzzle 6 to 10 inches of the bore. Evidently the fouling built up during first chronographing tests and had prevented obtaining any decent accuracy with any bullet tried. Alternate firing and bore scrubbing procedures showed that with 44 grains of powder the Sierra 63 grain bullet fouled quickly, as did some 62 grain bullets made with

(Continued on Page Seventeen)

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NEW SAVAGE MODEL 110-MC BOLT ACTION RIFLE CALIBERS .243 WIN. & .318 WIN.

by
Colonel Townsend Whelen

As I predicted recently in Precision SHOOTING, Savage is now producing their new Model 110 bolt action rifle in .243 and .308 calibers. They have brought out a slight variation of their original Model 110, which is furnished in .270 and .30-06 calibers, and with a standard sporting stock. The new Model 110-MC rifle is being introduced in .243 Win. and .308 Win. calibers, as well as in .270 and .30-06, and it differs from the original Model 110 chiefly in that it has a high comb Monte Carlo stock. Also in .243 and .308 caliber it is furnished with a short action with receiver about half an inch shorter. Other than the new stock and the short action, this new Model MC rifle is very similar to the original Model 110. Both the new

and the old models are now in production, and a retail price of \$109.75 has been set for both models and in all calibers.

Through the kindness of the Savage Arms Corporation I have had one of the new Model 110-MC rifles in .243 caliber for examination and test. It is an exceedingly attractive, little, light weight rifle of some 6 3/4 pounds with a compact short action, and a very attractively shaped stock with Monte Carlo comb designed particularly for use with a telescope sight. The length of the stock is 13 1/2 inches, drop at front of comb 1 1/2 inches, at rear of comb 1 13/32 inches, and at heel 2 1/2 inches. The comb is made really slightly higher in rear than in front to minimize the effect of recoil. I find, on shooting the rifle with a scope, that this dimensioned stock very excellently supports the face so that the eye comes accurately into the line of aim through the scope in practically all firing positions. The shotgun type of checked aluminum butt-plate is blackened. There are no sling swivels, but these can easily be added. Altogether the lines of the stock are most attractive. Both grip and forearm are checkered. The short action appears to be exactly similar to that on the Model 110, which I have already described, except that the receiver is about half an inch shorter. It appears to be a most attractive light weight hunting rifle with a particularly fine balance.

The standard rifle is equipped with only an open rear sight on the barrel. In order to test it for functioning and accuracy I fitted this .243 caliber with a Lyman 4 power Challenger scope, using the Redfield Junior mount, and shot Savage factory ammunition. These cartridges loaded with both 80 and 100 grain bullets, have new soft point, spitzer bullets which Savage terms the "Top Notch Bullet, scientifically designed soft lead bullet encased in a copper jacket with interior notches at forward end that give the bullet positive and controlled expansion without disintegration." Of course only experience will tell the killing qualities of this bullet, but there seems no reason to doubt it in advance. One excellent feature is that the 100 grain bullet has a small cannellure about 1/8 inch forward of the case mouth so that it can be told from the 80 grain bullet in the cartridge.

Both loadings functioned perfectly through chamber and magazine, the latter holding four rounds, which with one round in the chamber, makes it a five-shot weapon. I shot it for accuracy at 100 yards from my bench rest, in groups of five shots, allowing the barrel to cool after each ten rounds as more firing heats this light barrel up pretty hot. With the 80 grain cartridge the smallest group measured .95 inch and the largest 1.70 inch. With the 100 grain load the smallest group was 1.90 and the largest 2.50 inches. Considering that I was using a 4 power scope, and aiming at a 3 inch white center on a black bullseye, there was probably at least a quarter inch aim

error in each group. This shows most excellent accuracy for such a light weight rifle and factory ammunition, ample for all hunting purposes. Another interesting point is that with the same sight adjustment the center of impact of the 100 grain cartridge at 100 yards was just one inch below that of the 80 grain load. For hunting both loads could be very conveniently used with the same sight adjustment. Five groups were thus fired with each load.

The recoil with both cartridges was quite sharp. It would mean little to a man used to shooting light weight center fire rifles, but might be disturbing to some ladies. Other than this I should say that the rifle was an ideal ladies rifle, as well as a particularly fine light weight rifle for any hunter who did not want to be burdened with a heavier arm. I did not have opportunity to try this rifle in .308 caliber, but judging from the difference in the recoil of the two cartridges in other rifles, I should judge that the recoil of this rifle in .308 caliber would be rather severe. My own experience has been that there is little difference in the appreciable recoil between the .308 and the .30-06 cartridges with equal weight bullets.

The rifle appeared to me to be very efficient and most attractive in appearance and balance for such a light weight weapon. In .243 caliber it should be an ideal weapon for varmints, and also for deer and antelope for those who desire a very light rifle. In .308 caliber it undoubtedly has ample killing power for our largest big game. Of course this is predicated on its being fitted with effective iron or scope sights.

A POSTAL RIFLE LEAGUE OPPORTUNITY

The DACOTA LEAGUE, a postal, gallery rifle four position league, has been operating for four years, last year with six teams in North and South Dakota. Now, the league wishes to expand to provide more and better competition. It will welcome the entry of teams from anywhere in the United States.

The league is registered with the National Rifle Association and the only limitation on team entry is that they must represent organized clubs that are NRA affiliates. The course of fire is 10 shots in each the prone, sitting, kneeling and standing positions at 50 feet range, .22 cal. rimfire rifle with any sights, NRA rules to apply. Teams may consist of any number of registered shooters. Firing is on registered, numbered targets supplied by the league. Team score is computed from the five high scores in each position. The league firing schedule will begin the first week in December and extend for sixteen weeks with one match each two weeks, a total of eight matches. The match fees are \$1.75 for each registered firing member on a team. The league manager is R. F. Manson, Box 205, Watertown, South Dakota.

This league would seem to offer an excellent competitive opportunity to clubs that may not be conveniently located for shoulder-to-shoulder league competition, or for any club that may wish to extend its competitive experience. You may request additional information from the league manager, or send your entry to him with entry fees to cover your firing members.

In the interest of promoting convenient, wide-area, shooting competition, we pass this information along as a public service.

PHT

The Information Bench

(Continued from Page Fifteen)

Sierra jackets. Maybe these bullets will foul with even less powder, I don't know, but the 70 and 75 grain weights fouled with only 42 grains.

In desperation a pound of the finest grade ($\frac{3}{4}$ micron) molybdenum disulfide was obtained. By sprinkling a bit into a box of bullets and then tumbling them in the closed box a complete coating was obtained which cut the fouling about in half. With the 62 grain bullet and 43 grains of powder the accuracy has averaged $\frac{3}{4}$ MOA with the last few groups. With the few remaining 70 and 75 grain bullets the accuracy was still terrible. The bullets themselves may not be any good, they don't look good, are not uniform in weight, and were made in a 'one-shot' operation.

Do you know of any maker who might be able to supply a truly well made bullet of this weight? Many who advertise to the trade have been contacted but none care to make anything out of the ordinary. Their attitude is understandable since they could hardly expect to realize enough to make it profitable with only 14-inch twist barrels commonly available. Originally the goal was a 70 to 75 grain bullet with the jacket point practically closed, with no lead at the point and almost none in the ogival section. It was felt that this would provide a good wind-bucking shape and still allow expansion at impact. The bullet point shape, I believe, has much more (and the ogive less) to do with high velocity drag than is commonly realized. Exposed lead is of course quickly eroded away if pointed.

At present, however, I would settle for any point and ogive. Accuracy is paramount and special features can wait. From working with my present bullet maker I can see that it may not be possible to make a tight but deep hollow point by today's methods.

Any advice you may have, or reference to others interested in this line of experimentation will be appreciated. H. L. Holland, B.E., M.S.—California.

Answer: I have done only superficial work with the heavier .224 bullets. This was with 70 to 75 gr. bullets in the wasp case with 12" & 14" twists.

Accuracy was not nearly as good as the lighter and shorter bullets for several reasons. Apparently the gilding metal jacket material in common use today is not hard enough nor resistant enough to high temperatures to stand velocities much over 3400 to 3500 without producing conditions detrimental to accuracy. It is possible to fire $\frac{1}{2}$ minute of angle groups with velocities higher than this but the averages generally are considerably higher than $\frac{1}{2}$ min. In addition there are no bullet jackets available at the present time, long enough to make 75 gr. bullets, which are dimensionally good enough to equal the results obtained with 50 to 60 gr. bullets windy or not. This is the problem with the 6 mm also.

One of the reasons why high quality jackets are not available for these long bullets is that they are difficult to make. The depth of the draw is such that wall thickness variation is more likely to occur than in short jackets. In order to maintain $\frac{1}{2}$ min. accuracy or better the maximum wall thickness variation of approximately .0005" is required.

The 14" twist of course is not fast enough to stabilize more than approximately a 60 gr. bullet with a long point at velocities below 3400. The bullet which you describe would approximate

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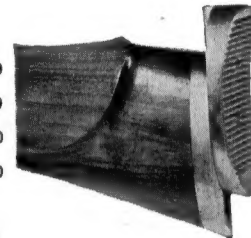
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an inch in length. In the .224 caliber this would require a twist of 10" or faster for adequate stability at velocities below 3400.

Bruno Boroszewski, Chestnut Ridge Rd., R. F. D. #1, Orchard Park, N. Y.
(Continued on Page Eighteen)



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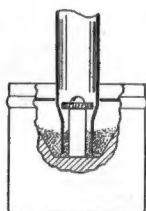
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VERMONT HI-POWER RIFLE CHAMPIONSHIP

Creighton Audette, Springfield, Vt., again successfully defended his Vermont Hi-Power Rifle championship title in the tournament at Northfield, Vt., September 28th. He won the 200 and 300 rapid fire stage (10 shots at each range) with a 98-11V, the 600 yd. prone stage with 98-12V, and was 4th in the 200 yd. standing stage with 47-1V for the winning aggregate of 243-24V.

George Pratt, Pownal, Vt., was runner-up with 235-13V and Joseph Phillips, Syracuse, N. Y., was 3rd with 234-18V while Irving Merry, No. Edgecomb, Maine, was 4th with 233-12V. Ira Solace, Montpelier, Vt., was high with Service Rifle and high Nat. Guard shooter with 231-14V.

Cecil McManis, Montpelier, Vt., won the 200 yd. standing stage with 47-3V, creedmoring Neil Finlayson, Springfield, Vt. and Joe Phillips, who both fired 47-3V scores.

Conditions were generally good except for a hard, cold wind at 600 yds. which fish-tailed from 10 to 2 o'clock. The local National Guard Co. operated the lunch concession and members of the Company did an excellent job of pit service. The tournament was sponsored by the Northfield Rifle and Pistol Club and the shoot is reported to have been very well conducted. There were 38 competitors.

The Information Bench

(Continued from Page Seventeen)
has done more work with the heavier .224 bullets than anyone I know. He finally came to the same conclusions I drew, that the lighter .224 bullets gave superior results under all conditions up to approximately 200-250 yds. Beyond this the answers are uncertain, however, there are quite a few of us trying to obtain these answers. M. H. Walker

Letters

(Continued from Page Two)

Oct. 3, 1958

Dear Mr. Teachout:

It occurs to me that you might find some interest in certain views held by

one who has been a shooter for over 35 years and a user of the bench rest, though never a competitor in formal bench rest competitions, for 15 years or more.

There seems to be a lamentable tendency for shooters, as of course all people, to divide into fragmented cliques which seem not only to care little for the special interests of other groups but, even worse, too often are actively hostile to them. Thus, we see a devotee of smallbore gallery shooting, let us say, grousing angrily about the space "wasted" in the American Rifleman on an article relating to the Kentucky rifle, or, perhaps, a .30 caliber target enthusiast expressing utter contempt for an article on the Winchester Model 94. Again, we see the Colt collector left completely cold by the treasures of the man specializing in Hawkin rifles. I think I found the secret of getting the maximum of joy out of firearms long ago. It consists in embracing the idea that all guns are to some degree embodiments of that very special love men have always felt for their weapons, and the corollary beliefs that fine specimens of every firearm type are beautiful and exciting, that every sort of shooting game or practice is stimulating and interesting.

So you see why I am grieved to see the wrangling that is going on between holders of different opinions relative to such matters as the conduct of bench rest matches, types of rests allowed and so on. It appears to this outsider that we are seeing here still further expression of that lamentable tendency alluded to above. The shooter who thinks of bench rest shooting as just another game, like military shooting or outdoor smallbore shooting, wants to limit the rifle to some degree and the rest to a greater degree in order that it will not be a mere contest of equipment and what he calls a "rich man's game." One of the "original" latter day bench resters, on the other hand, might say something like this: "It's a hell of a note when these damned Saturday afternoon reformed golfers want to come in and take over our game and set up a slew of rules against this and that so a real bench rest can't do any better than some bar tender who just went and bought himself a new rifle and hired a good gun man to tune it up for him. We started this business to try to see just how accurate we could make a rifle shoot with no holds barred and by God that's the way it ought to be."

Now I say that it's not possible in good conscience to deny the merits of either's position. I say, further, that there is no logical or practical reason why the desires of both cannot be taken into account in the management of the bench rest programs. First off, though, I should wish to point out that the backbone of bench rest shooting has always been and probably always will be the died in the wool, hard bitten, experimenter, tool maker, ballistician, scientist, mechanic—the guy who is going to find out if he can what makes it work and how to make it work. There should always be the primary emphasis on this guy and his desires. This means completely unrestricted class shooting, and I mean unrestricted, except possibly for weight, in all respects both as to rifle and as to rest.

The tremendous impact the work of the bench rest clan has had on rifle, bullet and cartridge design and manufacturing these last years is a matter of record. Why not try to incorporate that factor as much as possible in all bench rest activity and in so doing, harness to a

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degree both the enthusiasm of the old hands and the desires of the more casual competitor for good competition in a shooting game he likes without the necessity of literally ordering his life around it. How to do this? I haven't the least doubt that a bit of imagination would turn up a thousand possibilities.

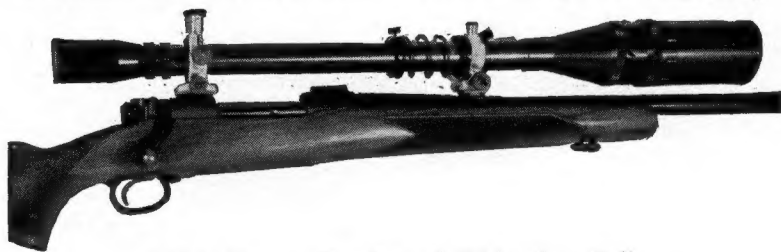
The international matches at Moscow have just ended with the Russians murdering us again. I don't know how the rest of you feel but I for one am getting mighty tired of seeing this "nation of riflemen" regularly humiliated by that nation of regimented automatons. While it is perfectly clear that the major factor in our defeats has been the superior shooting of the Bolsheviks, it is certainly also true that our men have been less well armed than should have been the case for representatives of a nation that takes special pride in its scientific and technical excellence. Let's take a leaf from the book of international science with their "International Geophysical Year," and declare for the bench rest organization a special "International Match Rifle Year" devoted to focusing all the talent, technical skill and knowledge of the bench rest shooting clan on the problem of developing the finest Free rifle the world has ever seen. The fellow who competes in bench rest activity just as a game may wonder how this sort of thing could have any place in his sport. The real old timer, however, would think it right up his alley and exactly the kind of challenge he revels in, exactly what the game needs to keep it interesting and meaningful. He'd recognize it as the very same kind of challenge that he has been regularly meeting in his work with special bench rest type rifles.

After the clan has developed the best Free rifle on earth, it might turn its attention in various ways to effecting a similar improvement in the many other types and varieties of rifles including, I respectfully submit, rifles suitable for military use. It may not always be desirable to declare a special "year" for big game rifles, say, or for .22 caliber plinkers, or lever action sporters, or what not, but it would be feasible in countless ways to direct the abilities of the bench resters toward improving those many differing kinds of rifles that in one way or another are important in the firearms scheme of things.

Concerning rests, I should think that in matches for all types of what we might call "practical" rifles, the completely unrestricted sort of rest should be disallowed. After all, in an effort to prove a practical rifle, it is necessary to know what the gun can do under conditions as nearly as possible duplicating those of off the shoulder shooting.

I could go on quite endlessly with ideas and suggestions along these lines but I think this will do for now. I might say that in general I like your little paper very much; however, I should like to see more technical stuff and more dope on equipment used in matches rather than so much mere listing of winners'

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names. Best wishes.

Sincerely,

DeVere Hinckley
Cowley, Wyoming

Plastic Cartridge Cases

(Continued from Page Five)

Dardick by Rogers Manufacturing Co. of Middletown, Conn.

The first version of the gun will be offered commercially by the end of this year, Mr. Dardick stated. It will be a 15-shot pistol with two interchangeable barrels, one .38 cal. and the other .22 cal. The retail price is expected to be below \$100.00. The cost of the ammunition, Mr. Dardick said, will not exceed that of conventional cartridges and may be somewhat less.

A smaller and lighter model with a capacity of 11 shots will be brought into production concurrently as well as a rifle stock assembly for converting the pistol, instantly, into a light-weight rifle that complies with all government regulations. The rifle conversion will cost less than \$25.00.

(Editor's note: The above is a manufacturer's "News Release." While it appears that the Dardick system is a practical one, and perhaps a progressive one for some types of firearms, it does not at the moment seem to this writer that it promises any prospects of improvement in precision accuracy. However, I can well remember when those who would fly in machines were plain crazy, and when automobiles were obnoxious play-things. We would be foolish indeed not to keep abreast of fresh ideas in the firearms field.)

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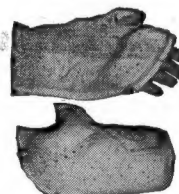
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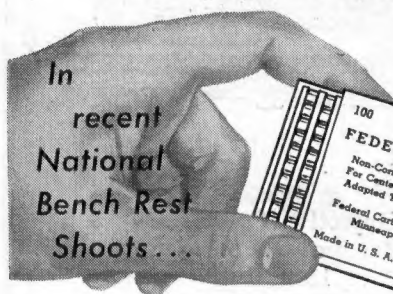
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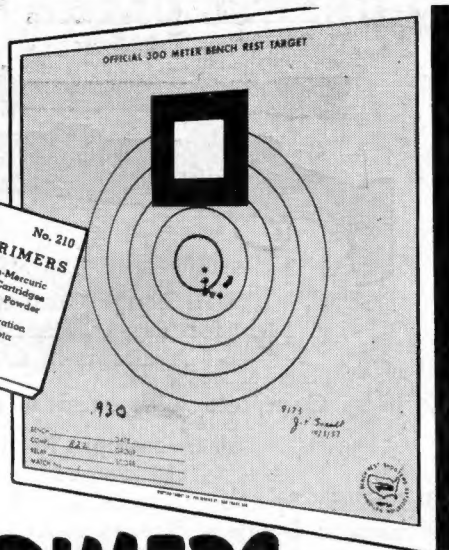
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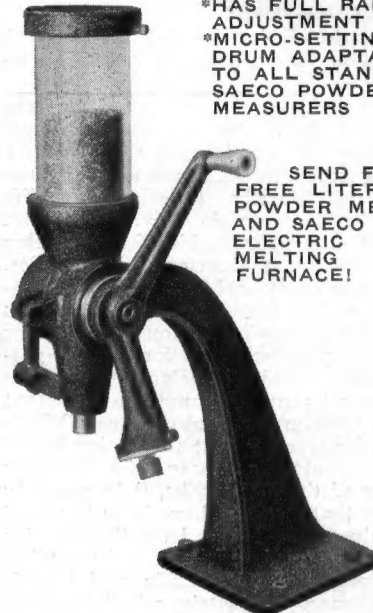
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2. National Small Bore Championship, Camp Perry, Ohio, 1957, John Moschkau.
3. 300 Meter Aggregate score, Du Bois, Pa., 1957, Don Robbins.
4. First and Second places, 300 meters, Du Bois, Pa., 1957, Clair Taylor and Don Robbins.
5. National Match Course, Du Bois, Pa., 1957, 1st, 3rd, 6th, 7th places.
6. National Match 10-shot 100 yd. aggregate, Augusta, O. Al Creighton, .3105".
7. National Bench Rest Championship, Johnstown, New York, 1955, Sam Clark, Jr.
8. 10 Shot 200 yard **WORLD RECORD**, Du Bois, Pa., 1954, Sam Clark, Jr. Score, or Group, .5276"
9. 10 Shot 200 yard **WORLD RECORD**, Du Bois, Pa., 1956, H. L. Culver (Present record) Group size .4016"
10. 1000 Yard, Famous Wimbledon match, any sight, 1955, Camp Perry, O. Frank Conway.
11. 1000 Yard, Famous Wimbledon match, any sight, 1956, Camp Perry, O. Frank Conway.*
12. Newest National Match Course winner, Wichita, Kans., Sept. 28, 1957, H. W. Barton, official new record, .3729" M. A. average.

* First two-time winner in 57 years.

Other individual matches, too numerous to detail, were taken by Douglas **ULTRARIFLED** barrels, in 1953, 1954, 1955, 1956 and 1957, since the advent of our development of **ULTRARIFLED** barrels in 1953.

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